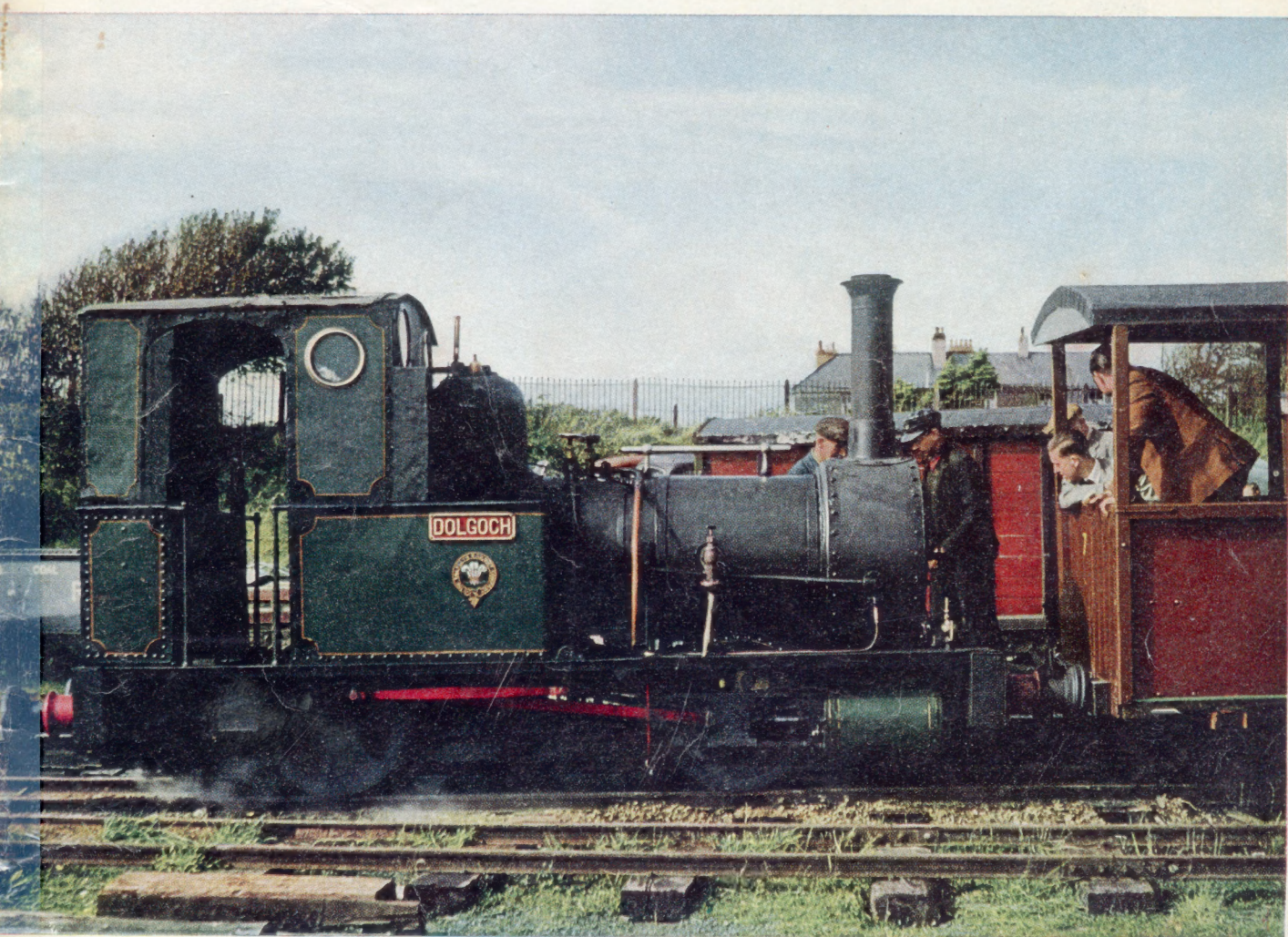


AUGUST, 1965

# AIRFIX

magazine FOR PLASTIC MODELLERS

MONTHLY 1'6



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THIS  
ISSUE**

**Simple modifications to Airfix Beaufigther**  
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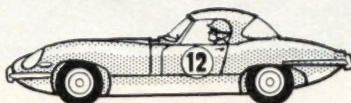
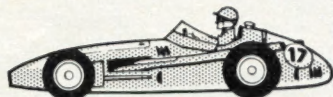
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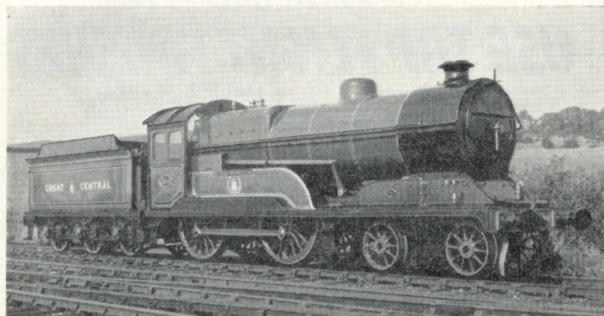
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Yes, a visit to this exhibition is a fascinating experience—a marvellous idea for a Saturday or while on holiday.

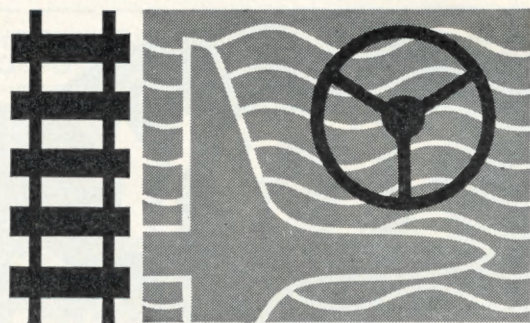
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# AIRFIX magazine

## FOR PLASTIC MODELLERS

Volume 6, Number 12

August, 1965

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The page where you have the chance to tell us what you think—and earn yourself a free Airfix plastic kit, plus a free double ticket to the National Model Show ... 383

### COVER PICTURE

*Dolgoch has just brought a train from Abergynolwyn into Town Wharf Station on the 2 ft 3 in gauge Talylyn Railway in North Wales. The Talylyn celebrates its centenary this year with the two locomotives and four carriages supplied for the opening of the line still in service; the other centenarian is Talylyn. To help celebrate the centenary, a special souvenir magazine has been published (see review on page 379).*

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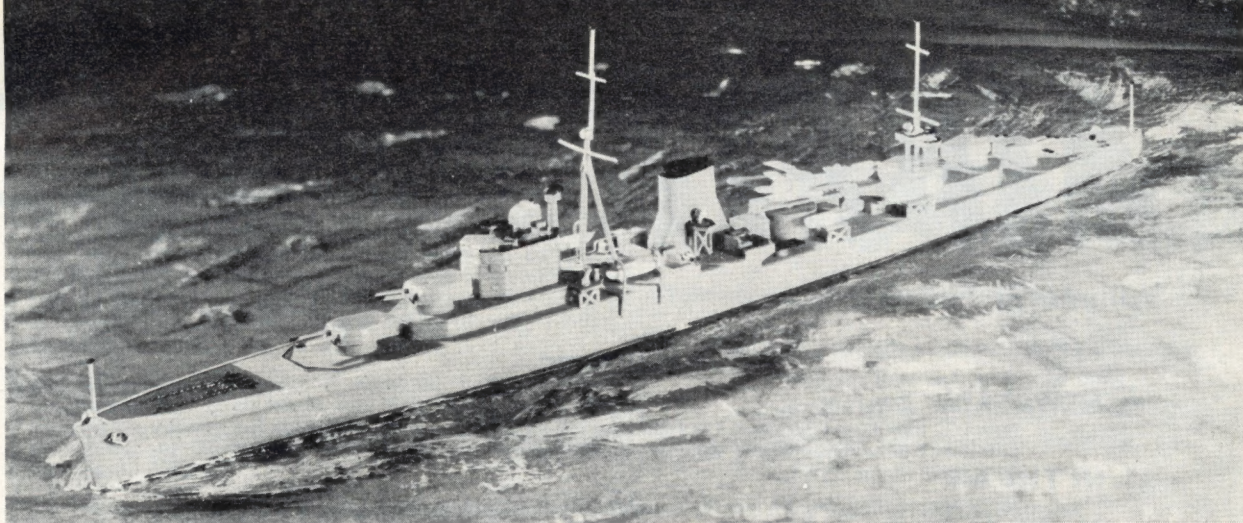
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*Latest Airfix warship is this 1:600 scale replica of HMS Ajax, price 6s. Its 91 detailed parts assemble into a model 11½ inches long, with a host of moving parts.*

# NEWS FROM **AIRFIX**

The world's greatest value in construction kits

## **HMS 'Ajax' and Aichi D3A1 kits**

**PLUS OO/HO SCALE PARATROOPS SET  
AND TWO NEW SLOT-RACING CARS**



THERE is something to suit most modelling tastes in the latest Airfix releases. New construction kits are a 1:600 scale replica of the cruiser, HMS *Ajax*, and another 1:72 scale aircraft, the Japanese Aichi D3A1 (Val) dive-bomber. Other items this month include two new slot-racing cars—a Maserati and a Vanwall—and an OO/HO gauge set of paratroops.

Colourfully boxed, the *Ajax* kit—which sells for 6s—has 91 finely moulded grey plastic parts, and makes up well into an interesting model. In common with most of the Airfix warships, the *Ajax* features many moving parts. The four main gun turrets, the aircraft catapult and the crane all revolve, and the crane jib elevates freely. The two multiple torpedo tubes can also be made to swivel, and there is a choice of gun barrel elevation. All eight 6 inch gun barrels are moulded separately and may be cemented into place at any desired angle.

A four-part Sea Fox spotter plane is provided for the revolving catapult, and other upper deck detail includes gun directors, searchlights, machine guns, hatches, a capstan, water break, anchor chains, open hawse pipes, bollards, dead-eyes, a jack stay and an ensign stay. A collection of boats either hang from slender davits or rest in cradles, and these include a miniature gig, two whalers and three motor boats. Masts and planking detail complete the upper decks.

The two-part hull is accurately shaped with a sharply flared bow and rounded stern, and features portholes, bilge keels and a water-line painting guide. Two anchors are included, while below the water-line there are four propeller shafts with propellers and a rudder. A two-part display cradle is included for the finished model, along with the usual full painting and assembly instructions and cement.

The cruiser *Ajax*, as modelled by Airfix, was the eighth Royal Navy ship to carry the name, and was one of the *Leander* class of 6 inch cruisers that were built in this country between the wars. Constructed by Vickers-Armstrongs at Barrow, *Ajax* was launched on March 1, 1934.

By far the most famous incident in her long war service was the Battle of the River Plate in December, 1939. Then, accompanied by her sister ship *Achilles* (serving with the Royal New Zealand Navy), and the *Exeter*, she encountered the German

*A 36-part kit of the Aichi D3A1 Val, price 3s, has been added to the Airfix range of 1:72 scale aircraft.*

AIRFIX magazine



pocket battleship *Graf Spee*, which was eventually forced to scuttle herself.

*Ajax*—broken up in 1948—had a length of 555 feet, a beam of 55 feet and a draught of 16 feet. She displaced 6,985 tons and carried an armament of eight 6 inch guns, eight 4 inch anti-aircraft guns and a variety of smaller weapons. Originally she carried two aircraft, and had a complement of 550 officers and men. Her 72,000 shp geared turbines gave her a speed of 32½ knots. The Airfix model is 11½ inches long.

### AICHI D3A1

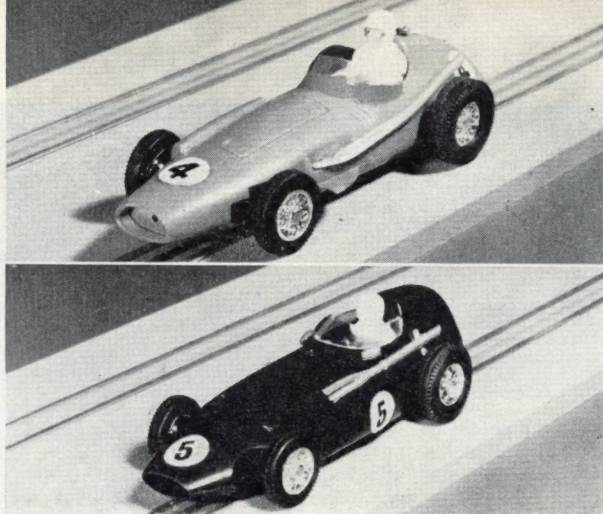
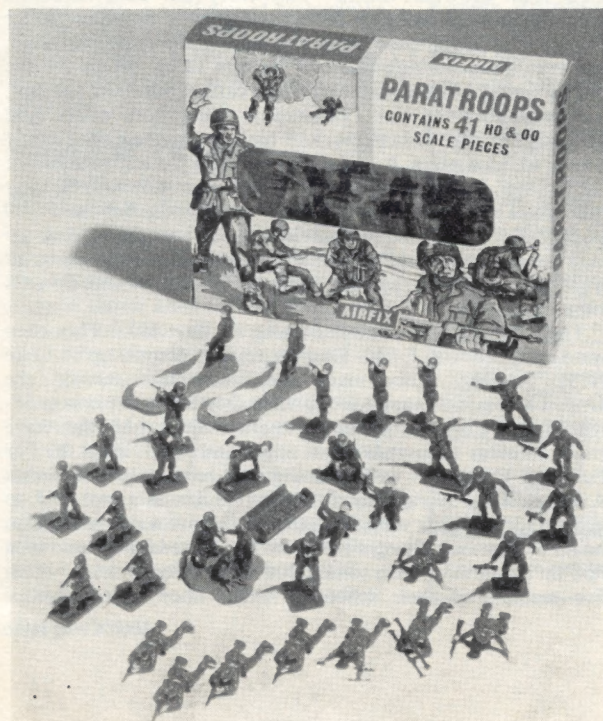
**L**ATEST Airfix Series 2 model aircraft to be announced is a 1:72 scale Aichi D3A1 (Val), the second world war Japanese dive-bomber. Moulded in pale grey and transparent plastic, the strikingly boxed Aichi comprises 36 finely moulded parts. The kit includes the usual full instruction sheet, covering painting and assembly, and a nine-item colour transfer sheet featuring authentic Japanese markings.

Moving parts featured include a working arrester hook, revolving undercarriage wheels and moving propeller. The under-belly bomb rack can either be cemented into place or fitted dry and allowed to pivot freely. A crew of two is provided, and other interesting details of this model (which sells at 3s) are the three-part cockpit canopy, which can be assembled with the hoods either opened or closed, an intricately moulded radial engine, wireless aerial, miniature 550 lb bomb, underwing dive brakes and moulded panel, rivet and control surface lines. The control surfaces also have a finely etched 'fabric' finish.

Standard Japanese carrier-borne dive-bomber at the beginning of the second world war, the Aichi type 99 (known to the Allies by the code name of Val), was the spearhead of the attack on Pearl Harbour on December 7, 1941.

The Aichi D3A1 (Val) was fitted with a 1,075 hp Mitsubishi Kinsei radial engine, giving it a maximum speed of about 225 mph and a range of 900 miles. Defensive armament comprised two fixed 7.7 mm machine guns firing forward, and a flexibly mounted 7.7 mm gun in the rear cockpit. Normal bomb

For 2s, OO/HO scale wargamers can now equip their layouts with this 41-piece set of paratroops.



*A Maserati 250F (top) and a Vanwall—both 2½ litre Grand Prix cars—are now available in the Airfix 1:32 scale Motor Racing range. They are priced at 17s 6d each.*

load was limited to one 550 lb bomb slung beneath the fuselage, and provision was also made for two light bombs to be carried beneath the wings. Wing span was 47 feet 1 inch, while length was 33 feet 7 inches. The Airfix model spans 7½ inches, and is 5½ inches long.

### PARATROOPS

**K**EEN OO/HO scale wargamers will be pleased to hear of the latest release in the range of Airfix military figures. It is a 41-piece set of paratroops. All the parts are moulded in soft, olive green plastic and are complete apart from painting.

The set includes one figure depicting each of the following: an officer; mortar NCO; paratroop loading mortar; radio operator; paratroop firing bazooka; paratroop loading bazooka; and paratroop unloading container. Four separate pieces depict a mortar barrel, mortar bipod, mortar base and supply container. There are two figures each showing paratroops hauling in their 'chutes; paratroops crawling; paratroops throwing grenades; paratroops on guard; paratroops wounded; and paratroops clubbing with rifle butts. In addition, there are two parachutes; two parachute bases; three paratroops standing and three kneeling firing; four paratroops running; and four laying, firing. Price of the set is 2s.

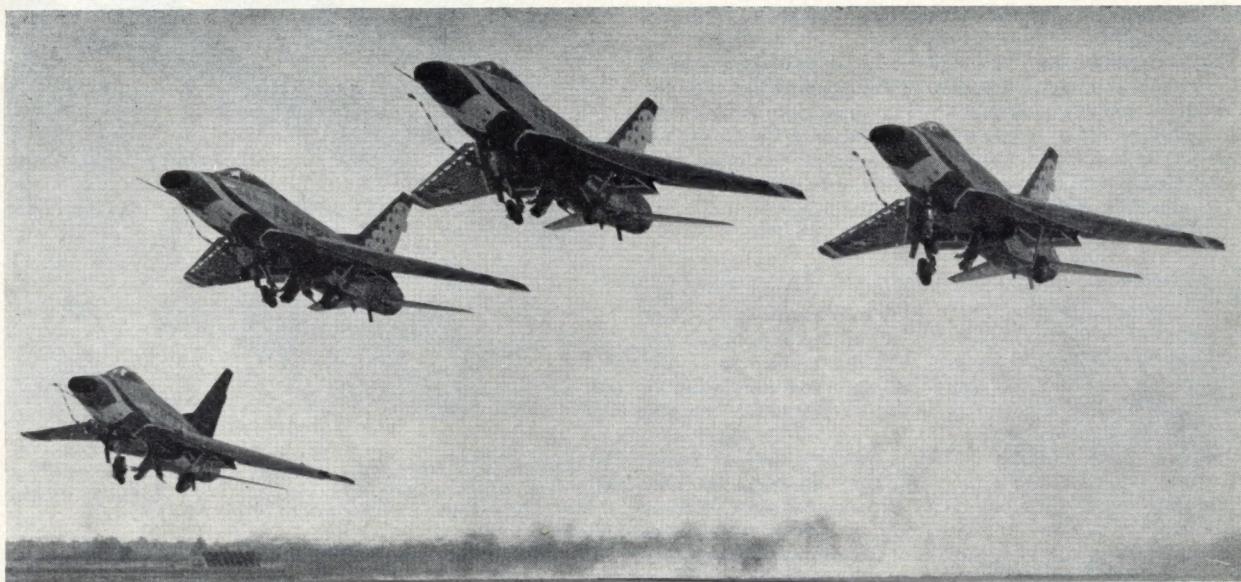
### TWO NEW GRAND PRIX CARS

**T**HE two latest Airfix 1:32 scale electric slot-racing cars are handsome miniatures of the 2½ litre Vanwall and Maserati Grand Prix racers. Both have all the well-tried features of Airfix racing cars, such as Ackermann steering, 12-volt motors, soft rubber racing tyres and two-piece bodies, together with some of the latest improvements, such as chromed wheels, exhausts, filler caps, radiator grilles and mirrors.

The Vanwall has true-to-prototype wire spoke wheels on the front and 'wobbly web' disc wheels on the rear, and includes several other realistic features—exposed suspension coil springs, faired-in mirrors, racing numbers, transparent windscreen and driver. It is finished in British racing green.

Also finished in its national racing colour, red for Italy, is the Maserati, a 250F. This is fitted with realistically moulded, chromed wire wheels all round, has a long bonnet air intake, several body louvres and, a typical feature, curved stone deflectors behind the front wheels. Price of both new cars is 17s 6d each.





*The Thunderbirds aerobatic team get airborne.*

## THUNDERBIRDS

For this, I have chosen the story of the United States Air Force Thunderbirds aerobatic team, which put up such an impressive show at the flying display held on the last Sunday of the ten-day show. I was able to visit the Thunderbirds at their temporary home, Evraux Air Force Base, some 60 miles from Le Bourget. I saw the efficiency with which they work to provide one of the most impressive flying displays seen on this side of the Atlantic for some time.

This does not mean to say that I belittle the efforts of our own CFS aerobatic team, the Red Arrows, or the equally powerful display given by the Lightning F3s of No 111 Squadron. The difference is a professional one. Treble one pilots and the CFS team are 'part-timers'—they carry out their aerobatic commitments in addition to operating as a first-line fighter squadron or as full-time flying instructors. The American team, however, does nothing else but perform at air shows for the whole period of duty that each pilot carries out with the unit.

All members of the Thunderbird team, both pilots and ground crew, are volunteers, and have to compete with many others to get a place. It is the prize posting for any member of the US Air Force, and the officers and men show this in their attitude. They work hard and for long periods, but the F-100 Super Sabres are rarely unserviceable, and wherever they go they are accompanied by a C-130 Hercules absolutely crammed with spare parts, so that the whole unit is almost entirely self-supporting.

The Thunderbirds came into being in May, 1953. They then were equipped with F-84G Thunderjets, and formed up at Luke AFB, Arizona. They made their first trip outside the United States in January, 1954, when they took part in a goodwill tour of Central and South America. Since then, they have travelled many thousands of air miles, and have visited the Far East and Europe as well as doing two return visits to South America. They average nearly 100 performances a year and, to give an idea of their versatility, they once gave a demonstration on a Far East visit, flying direct from the United States, and then flew on to another venue some 1,200 miles away, arriving within five seconds of their scheduled time. They were refuelled

AIRFIX magazine



**I**F you wanted to sum up the 26th Salon d'Aeronautique in Paris, it would be apt to say that this exhibition and flying display was notably a battle of the giants. Although a French exhibition, the Russian and American entries dominated the show. The gigantic Russian transport, the Antonov AN-22, and the Lockheed C-141 Starlifter—apart from being the largest aircraft at Le Bourget—typified the efforts put in by these two countries to impress the rest of the world with their engineering and production capabilities. The essential difference was that, whereas the Americans displayed an entirely military collection of aircraft, the Russians went in the opposite direction, showing nothing but civil transports.

To cover an exhibition of this size, which featured no less than 400 aircraft, is no small task. After spending more than a week in Paris there were still many parts of the exhibition that I did not have a chance to see, let alone examine in detail. As this month's Profile article (page 376) deals with many of the aspects of the Paris show that have a special application to the model maker, I have centred my own comments on one or two things at the show that impressed me as being of interest and value to those concerned with the background story to their model aircraft.



**Top to bottom:** The Antonov AN-22 Russian transport aircraft, capable of carrying 724 passengers. Based at Evraux during the Paris Show, the Thunderbirds team prepare for their part in the flying display. This P-51 Mustang, one of the few in civil markings, was flown during the show by Captain Hoover. Camouflaged F-105s at Chaumont Air Force Base featured two-tone green and brown schemes, with small USAF stars on the fuselage sides only. This aircraft was serialised AF00483.

en route by a succession of air-to-air tankers which took just seven minutes for each complete refill for the whole seven-aircraft team.

Changing to North American F-100 Super Sabres in June, 1956, the Thunderbirds moved home to Nellis AFB in Nevada. The team's official title as part of Tactical Air Command is the 4520th Air Demonstration Squadron. They operate seven F-100s, an F-100F two-seater and are supported by the C-130 Hercules. The commanding officer is Major Paul A. Kauttu, who is at present on his second tour with the Thunderbirds. He graduated as a pilot at Williams AFB, Arizona, in 1951 and is credited with 2½ MIG-15 kills during the Korean war.

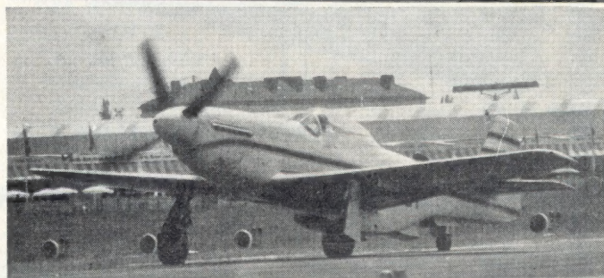
The Thunderbirds demonstration at Le Bourget this year is the second they have given at the Paris Air Show. They first appeared there in 1963, and I must say that I was not then terribly impressed with their performance. The team stuck so rigidly together that they were out of sight of the crowd for quite long periods while they turned and came back for another run. The F-100, it appeared, was not an ideal aerobatic aircraft. Perhaps their encounters with our own aerobatic teams gave them food for thought, as the present show is excellent. Aerobatics and some real crazy flying by single or pairs of aircraft divert the attention from the main body, who may be some miles away in a turn, and I thought that the standard they displayed in practice at Evraux and during the actual show was very high. The flying was so close, in fact, that one of the aircraft landed after the practice at Evraux with its fin and rudder blackened by the jet exhaust of another. I wonder what the ground crew thought who had to clean it up or, indeed, the thoughts of the pilot who got himself into that position!

## RETURN TO CAMOUFLAGE

Mike Bowyer comments in this issue on the re-introduction of camouflage on United States Air Force aircraft now stationed in Europe. I can bear out his remarks on this, as my photograph of the F-105 at Chaumont reveals.

Apart from the normal run round the many Paris airfields for light aircraft, I went a little further afield this year. The object of my attention was the AIRCENT Weapons Meet at Chaumont, 160 miles east of Paris, where the 2nd and 4th Allied Tactical Air Forces were competing. Aircraft from the American, British, French, Dutch, Belgian, Canadian and German Air Forces flew long cross-country flights, followed by attacks using bombs, cannon and rockets against targets on the Suippes range near Metz. British aircraft in the competition were Canberras from 216 Squadron, who did simulated nuclear attacks on another set of targets close by.

The bustle of activity and the continuous arrival and departure of competing aircraft gave my camera plenty of work. Apart from the delight of being able to photograph the F-100s of the French Air Force, the F-104s from Germany and the F-84s of the Belgian and Dutch contingents, I found that the greatest delight was the discovery of camouflaged F-105s. I was informed that all Tactical Air Force aircraft belonging to the USAF will eventually be painted in this manner. The job is done when the aircraft go for major overhauls, and



already about half of the force has been completed. National markings and unit insignia have almost disappeared. The USAF star is now very small indeed, and only appears on the fuselage sides of these aircraft just aft of the wing roots. The camouflage colours themselves consist of two greens and a brown with off-white undersides. Individual aircraft numbers are painted in black in the normal position on the fin.

No-one could tell me why two greens were used for this camouflage scheme. The colours are almost similar but there are two distinct tones used. Thinking at first that the paint brush might have slipped, I examined every aircraft I could find to verify my discovery, but in every case the two greens appeared in similar patterns. This will undoubtedly cause a lot of trouble to the model maker, and I hope that before long someone will be able to publish an exact colour scheme of these aircraft.



# SIGNALS IN MINIATURE

IN general, signalling is the Cinderella of the model railway world—somehow it always seems to be one of the last things to be added to a layout. I have never been able to understand why this is, especially nowadays when ready-made signals are available quite cheaply. The proprietary systems have standard types in their ranges, and GEM produce some nicely-scaled signals for both OO and TT3. Ratio also turn out a very useful set of parts for Great Western signal construction in 4 mm scale, and Playcraft have a signal kit which contains a profusion of parts that can be made up in a variety of ways. All these are for



semaphore signals—colour light signals form a separate subject which I may return to in a later article.

It is also worth noting that signal components in 4 mm scale are available from a number of manufacturers: K's do signal arms, finials and posts; GEM do signal laddering and cranks; Hamblings have quite a range of parts. GEM also do neat 3 mm scale laddering. Certainly, if you are considering scratch-building, a visit to your nearest good model shop will be time well spent. Drawings of signals appear rather infrequently in the model railway magazines, but Skinley produce three blueprints with several types of signal on each sheet.

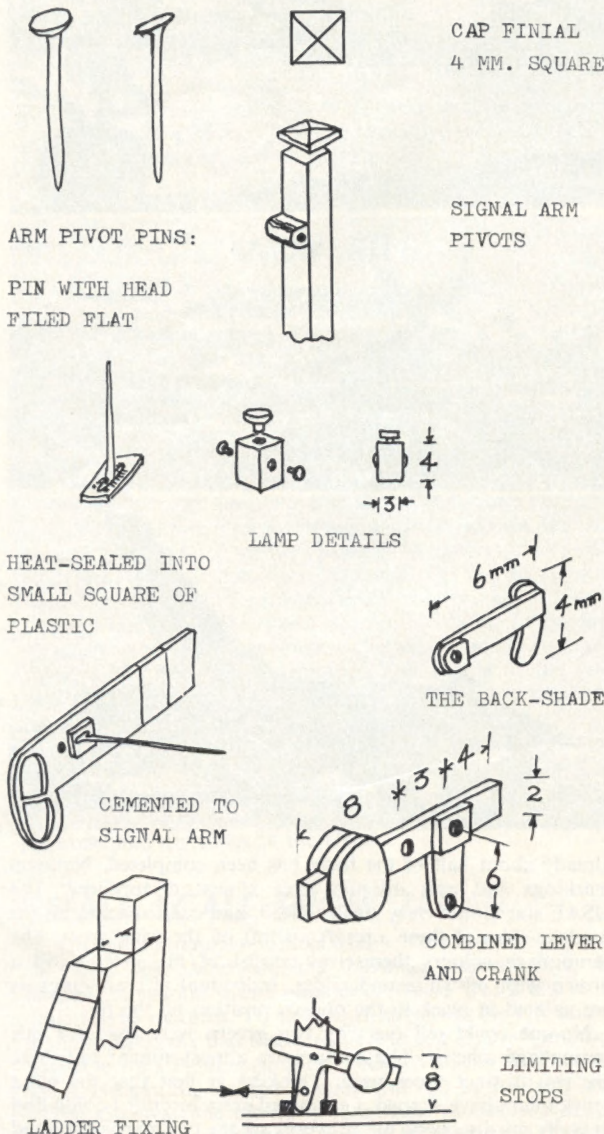
## HAVING A 'GO'

So much for the preliminary look-round—what about building your own signals, either from scratch, or using some of the components available? This need not be beyond the average plastic modeller's skill, provided that you are sensible and start with a simple type of signal. If you choose a complicated gantry with underslung 'dolls' you are almost bound to become discouraged before you start—leave that sort of complication until you have acquired the necessary confidence.

To show you how relatively simple construction can be, I will go through the making of an ex-LNWR or LMS square post lower quadrant starter signal. At one time, the question of square section plastic for the post was a problem, but now, fortunately, Structo materials are just about ideal, being based on what is, for all practical intents and purposes, a basic  $\frac{1}{8}$  inch measurement. The L-shaped section, with a square section cemented into the L, produces a strong post. Purists can sand it to a slight taper at the top.

## SEQUENCE OF CONSTRUCTION

1. The post. Cement the square Structo materials into their L section, cut to length and taper with sandpaper.
2. Add the finial. This is best done by cutting a square of 0.04 plastic sheet, cementing it to the top of the post and filing to shape when the cement has hardened.
3. Add the pivot for the signal arm. This is a small piece of the square section Structo material cemented to the post. I find it easiest to cement a long piece in place and to cut it to length when dry—this way it is easier to handle and to get the pivot square across the post. Drill through the pivot for the pivot pin, using a pin chuck in the fingers. Round off the square outer edges of the pivot with a file. If you are afraid of the drill breaking out, you can use small lengths of Mercontrol tubing cemented to the post with UHU.
4. Make the lamps: square ones can come from some of the Structo material you used for the post, thinned down in section by filing, the lamp top being a cut-down track pin or a spare coupling rod pin from a loco kit. Round lamps can be cut from a spare pillar from a platform canopy kit. The lenses in both kinds can be pins. A drop of liquid cement in the holes will seal them into the lamps. Cement the lamp to the post.



These constructional details are all amplified in the text. Measurements—where given—are in millimetres for 4 mm scale.



5. The signal arm is cut from 0.04 plastic sheet; the lenses are drilled out and filed to shape before the main outline of the spectacle is shaped. If your type of signal has round lenses, it is possible to put discs of coloured transparency actually into the holes, held in place with a touch of liquid cement. Other shaped lenses should have the transparency cemented behind the lens. It is worth noting that the colours for a plain home are red at the top and a bluish-green for the bottom—the yellow light shining through produces the green colour. I always thicken the arm where the pivot pin attaches and find the best method to be as follows. I file the head of an ordinary domestic pin as shown, heat it and seal it to a small square of 0.04 inch plastic. This square is then cemented to the back of the arm so that the pivot pin comes in the right place. This way makes sure that you don't muck up a laboriously shaped and glazed arm when you come to fix the pivot pin—the most you destroy is an easily cut square of plastic!

6. The back light shade is made from 0.04 inch plastic sheet, as shown in the sketch. The pivot pin hole is again double thickness. The pin, with the arm attached, is threaded through the pivot, the back light shade is put on and the excess pin nipped off. A drop of cement on the end of the pin seals it to the shade. Note that the shade is positioned so that the white back light on the lamp is uncovered when the signal is at 'danger' and is masked when the signal is 'off' or 'clear'.

7. Where the hole for the pivot of the lever is to be drilled, a small square or washer of 0.04 inch plastic is glued. This spaces the lever from the post and stops friction or binding of the control wire. The post is then drilled for the pivot. The levers can be parallel or at right angles to the arm.

## COMBINED LEVERS

8. The balance levers I make are a combination of lever and crank, and also enable me to limit the arm movement so that the signal moves to the correct 'on' and 'off' position each time. These combined levers are again made of 0.04 inch plastic as shown, and once again the pivot hole is double thickness to prevent unnecessary 'waggle'. This time, however, the pivot pin is pushed through the hole in the post and then through the lever. The surplus pin is cut off and a drop of cement keeps everything firm.

9. It is best to put the signal on to a baseplate now. This is again an oblong of 0.04 inch plastic sheet, sufficiently long to have the foot of the ladder attached to it. A simple glued butt joint between the post and the base will do, but a much better way is to drill a hole and file it square with a needle file to be a tight fit for the post, which is then cemented in place. This method allows you to make any small adjustments to get the post absolutely vertical without weakening the joint.

10. Fit the control wire—note that it goes through the hole in the arm from the back. There is no need to bend the wire into a U-shape, a simple L bend is enough, the post preventing the wire from coming adrift. The wire will, however, have to be bent U-fashion through the lever. Do not be discouraged if this wirework does not go right first time—I usually end up with one or two discarded wires on the bench before I have finished and they invariably come in for other signals in the end.

11. The limiting stops can now be cemented to the baseplate. This is where the crank part of the combined crank and lever comes in useful. Small bits of square section plastic glued to the base will limit the arm movement to the correct 'on' and 'off' position.

12. The ladder. If you use metal laddering from GEM, W & H Models or Hamblings, the method of fixing to the top of the post is shown. One rung at the end of the ladder is cut away

to leave 'barbs' on the inside which effectively grip the post. At the bottom, the ladder is sprung into two holes drilled in the baseplate. If you use plastic laddering (from, say, the Airfix water tower or the signal gantry kits) attach it at the top by two thin plastic ties to the post. The foot of the ladder is, of course, simply cemented to the base. A wire safety ring can be soldered (or glued with UHU) to the top of the ladder if you wish.

## PAINTING DETAILS

Upper parts of post—white. Lower parts of post, ladder, finial, lever, lamp, base, back shade, pivots, safety ring—black.

Home signal: front—red with white stripe; black from pivot to include the spectacle. Upper spectacle—red, lower spectacle—bluish green. Back—white with black stripe. Black from pivot to include spectacle.

Distant signal: front—yellow with black chevron, black spectacle as with home signal. Back—white with black chevron—black spectacle.

From these painting details, you will see that careful choice of the colour of the plastic you use for each component will cut down the amount of finicky painting you have to do. For example, white material is best for posts—only the bottom inch or so will have to be painted black—the baseplate will be black plastic sheet, as will the back shade, the lever and the finial. A home arm I make from white sheet—the white stripe is there for you; for a distant arm I use black sheet—and so on.

*Copyright, Mike Bryant, 1965.*

## ARE YOU A KIT CONVERTER?

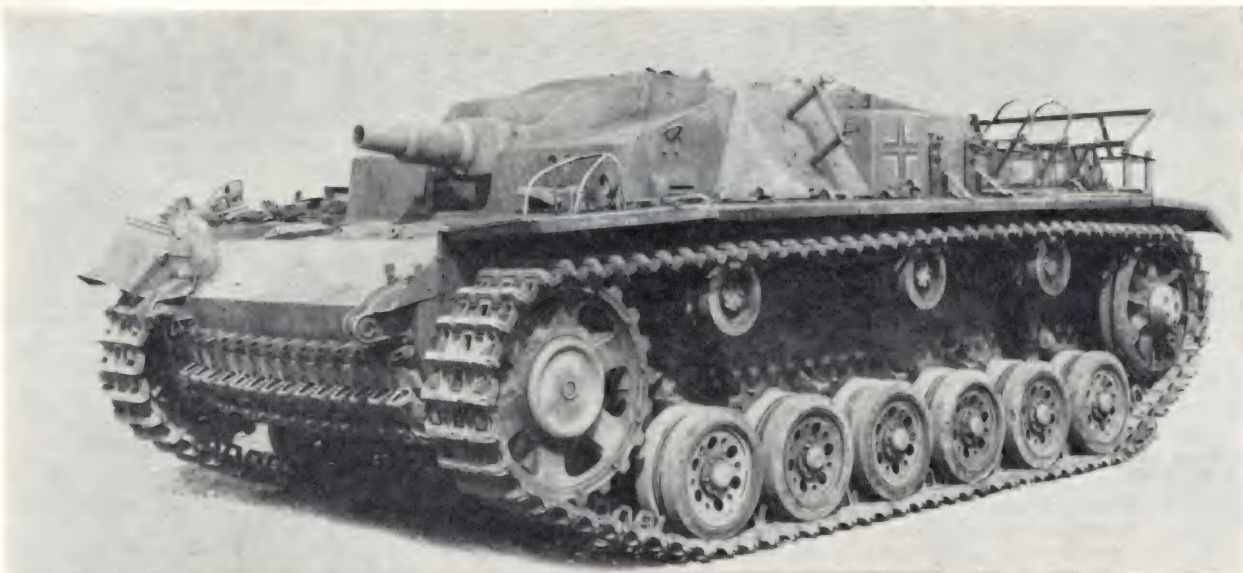
We have many letters from readers requesting back copies of **AIRFIX MAGAZINE** containing conversion articles. Back copies of many issues are still available for the benefit of readers who may have missed or mislaid earlier editions. For example, here are some of the practical articles which have appeared in recent issues.

**1964: August**—Converting Airfix Hunter and HMS *Hotspur* kits. **September**—Motorising the Airfix Saddle Tank. **October**—Converting the Airfix Ju 88. **November**—Conversions with the Airfix Centurion. **December**—Carrier conversions and Catalina Profile. **1965: February**—P-36A conversion with the Airfix Kittyhawk. **March**—More conversions with the Airfix Centurion tank. **April**—Making Japanese Infantry equipment and converting the Airfix Boston IV into an A-20G. **May**—Converting the Airfix Sherman into a Priest. **June**—Building a Hector from the Airfix Hawker Hart. **July**—Motorising the Airfix City of Truro.

Would readers please note that the following issues are now out of print: all 1960 editions; all 1961 editions; January, February, March, April, May, June, July, August, September and October, 1962; August, September, October, November and December, 1963; February, March, April, May, June and July, 1964; January, 1965.

Back copies cost 1s 6d each (including postage) for all issues up to and including August, 1963. From September, 1963, onwards, the cost is 2s per issue, post paid. Please address all requests for back copies, together with your remittance, to our circulation department at **SURRIDGE, DAWSON (PRODUCTIONS) LTD, 136/142 NEW KENT ROAD, LONDON SE1.**





## Military modelling

by C. O. ELLIS

# ASSAULT GUNS

## StuG III variants from the Airfix kit

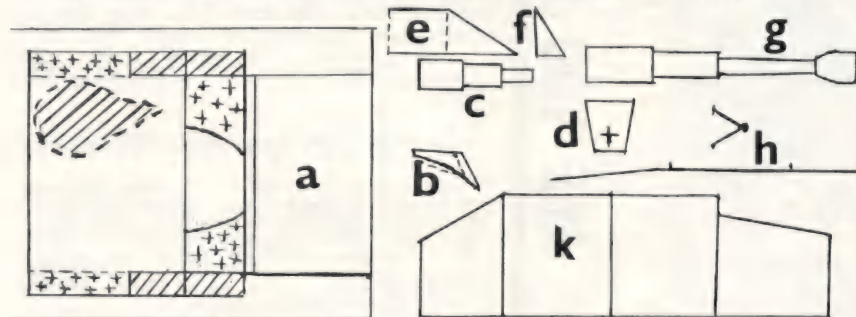
ONE of the finest models in the Airfix military range is the StuG III assault gun, which really captures the low, slightly sinister, look of the real vehicle. Many military collectors and wargamers will want—or will already have—quite a number of these indispensable vehicles, so it is time we had a look at the various versions to which the Airfix kit can be converted. These models are as easy as any could be for anyone who hasn't previously tried his hand at the gentle art of kit conversion, and at the same time they are not particularly demanding in the face of all the other diversions of the summer months.

Earliest version of the StuG III, designated Sd Kfz 142,

mounted the short-barrelled 75mm gun, and had a superstructure differing slightly from the later models. It differed dimensionally as well but, since a complete rebuild would be rather difficult, I chose to aim for a realistic appearance rather than measurements accurate to the last millimetre. The conversion requires the removal of the superstructure sides to the extent indicated by shading in drawing A. The resulting gaps are filled by the new side pieces shown in E. Small extensions, triangular in cross-section, as at F, are then added. Dotted lines on E show the width.

Study of the prototype picture will show that the sloping faces abreast the mantlet are flat. Fortunately the plastic at this point is thick enough to allow filing to achieve this appearance. The remaining side sections also need filing down by 1 mm so that the top of the superstructure appears stepped each side. All these areas are marked by crosses on drawing A. Next remove the cupola completely by knife and/or file, and plug the resulting hole with card to give a flush surface. The hatch is then cemented in position where the cupola was sited. Finally, reshape the coamings each side of the gun embrasure as shown by the dotted lines in B.

Now take part 55 from the kit (this is the breech-block) and cut off everything immediately forward of the trunnions. A mantlet backplate is required, cemented ahead of the trunnions,



### Key to drawings:

A—Hull alterations for the Sd Kfz 142.  
B—Reshaping coaming in the Sd Kfz 142.  
C—75mm gun and mantlet for Sd Kfz 142.  
D—Mantlet end for Sd Kfz 142/1 and 142/2 (front and rear required for each).  
E—Side pieces for Sd Kfz 142 (NB cut off front end level with superstructure front when cemented in position).  
F—Side extensions for Sd Kfz 142.  
G—Barrel and mantlet for 105mm howitzer.  
H—Support and rail for side armour.  
K—Side armour for Sd Kfz 142/1 and 142/2. All drawings are full-size.



and the shape of this is taken from the back of the mantlet (part 74) provided in the kit. In other words, simply put the mantlet flat on a piece of card and draw round it. The other assault gun variants to be described will also need this same modification. All that remains is the short 75 mm gun, shown in C, and made up easily from scrap. Apart from all this work, the sequence of construction follows the Airfix instruction sheet and needs no further comment.

## REPLACEMENT

By early 1943, a new version of the StuG III was coming into service, mounting the StuK 40 75 mm gun. Designated Sd Kfz 142/1, it gradually replaced the Sd Kfz 142, and was employed on the Russian, Italian and NW Europe fronts in large numbers during the remaining years of the war. In fact, over 8,000 of this version were built and it was a major service type with German assault gun battalions. The StuK 40 gun, derived from the Pak 40, was effective against armour, thus considerably increasing the versatility of the vehicle.

This is the version of the StuG III represented by the Airfix kit and hence familiar to everyone. The Airfix model, however, has a cast mantlet, indicating that it comes from a late production batch of vehicles. More frequently seen was the Sd Kfz 142/1, with a welded mantlet of squared-off, box-like appearance. For a little variety, therefore, a lot of modellers will want to make the early version, so a template is given for the mantlet cross-section (D). The length can be seen in G. I made this mantlet up face by face, cutting the pieces from styrene sheet. You don't really need a bottom face, as this cannot be seen when the mantlet is in position. The gun barrel provided in the kit is used, slotting the end into the front face of the mantlet. Then a sleeve is needed, made from a band of Sellotape cut to the required width (shown in G) and wrapped round the barrel.

## HOWITZER VERSION

Third of the assault gun variants was the Sd Kfz 142/2, which mounted a 105 mm howitzer of the type used by German field artillery units. This version went into production in 1942 and over 1,000 were built, as a complementary type to the StuG III's, with high velocity guns. A plan view of the 105 mm howitzer is shown in G, and it can be made with a length of cocktail stick and bands of Sellotape. The mantlet is identical to that of the Sd Kfz 142/1. The muzzle brake can be omitted if you find it too fiddling, as it was sometimes—but not often—left off the real thing. There are no other modifications required to the basic model, though you can replace the aerials by attenuated sprue or fuse wire for a better appearance. The machine-gun shield was often not fitted, in which case it is necessary to plug the locating slot.

One very important addition to either the Sd Kfz 142/1 or 142/2 models would be the armoured side skirts. These are entirely optional, but they give interesting variety to anyone who may want to make a number of assault gun models. The template is given at K, which shows the four sections making up the complete assembly. On my models I decided to copy the real thing and make a proper rail from which to suspend the sections. This is shown at H, together with the V-shape supports, two each side in the positions marked. Strips of styrene are used in model form and tweezers and care are also useful. If you don't want to go to such trouble, just forget the rails and stick the plates on to the edges of the track covers instead. With the skirts in position, the rail is almost concealed in any case.

Plenty of scope is allowed with these skirts. Since they were rather loosely suspended, individual plates often got torn off; or dropped down at one end; or got bent and mangled; or got



**Top to bottom:** Models under construction: the Sd Kfz 142/1 with welded mantlet and rails for side armour (left), and the Sd Kfz 142 with short 75 mm gun and modified superstructure. The Sd Kfz 142/1 with welded mantlet (left) and with cast mantlet as supplied in the kit. Note the section missing from the side armour. Sd Kfz 142 (left) and Sd Kfz 142/2 with side armour and 105 mm howitzer. Sd Kfz 142/1 of 1943 with the squared-off welded mantlet: reader Jussi Kurikka of Helsinki, Finland, sent us this interesting picture of the StuG III exhibited at the Finnish Tank Museum at Parola. Manned here by Finnish tankmen, it suggests an idea for a similar 'cut-away' conversion in model form.

shot away; or were taken off by the crew and stacked on the rear decking. So this is a matter left largely to individual preference. The actual plates were 5 mm thick and their purpose was to explode hollow charge shells (eg from bazookas) and so prevent them exploding on the suspension where they would have immobilised the vehicle.

## IN ACTION

Assault guns were principally used for infantry support; for example a complete assault gun regiment was part of each panzer grenadier division, and battalions were also found in panzer divisions, SS panzer divisions, SS panzer grenadier and mountain divisions.

In action, the StuG III could perform the function of normal field artillery with the additional advantage of mobility. Best employed in mass, rather than singly, assault guns were usually up with the attacking infantry moving in open order. Conversely, they relied on the infantry for protection, since the lack of a turret was a disadvantage when it came to self-defence. Assault

*Continued on page 382*



# LAYOUT REALISM

by Alex Bowie

## Should you have to guess?

THIS month, I am deliberately making much ado about what, at first sight, may seem almost nothing. A couple of modellers of my acquaintance made the complaint that most articles, allegedly on scenic work, dodge the issue completely, and I agree to some extent. A favourite phrase of some 'amateur' writers is, 'the scenery is made by the usual methods'. Others, exerting themselves a little, will mention which one of the various methods is used, for there happen to be more than one. But they don't give any details. Apart from this, which makes this scenic hobby one of the most under-described of them all, the average modeller has to develop his own instincts for scenic work. This is all very well, but even the best people rely on others to some extent.

Existing literature does not help much for, apart from works by the late John Ahem and the admirable book on 'Scenery' published by the American 'Model Railroader', the average

rather under-nourished scenic publication does little more than skate on the surface, and does not tell the reader much more than he could find out for himself. I don't think that I am being unkind, but the unfortunate thing is that ever since scenic work became popular, it has been regarded as easy to do and easy to write about. Quite seriously, this assumption is based on the fact that practically every man and woman alive is capable of putting up some sort of a show. And too often the capacity for making pretty little effects with sawdust and lint is mistaken for an aptitude for serious work.

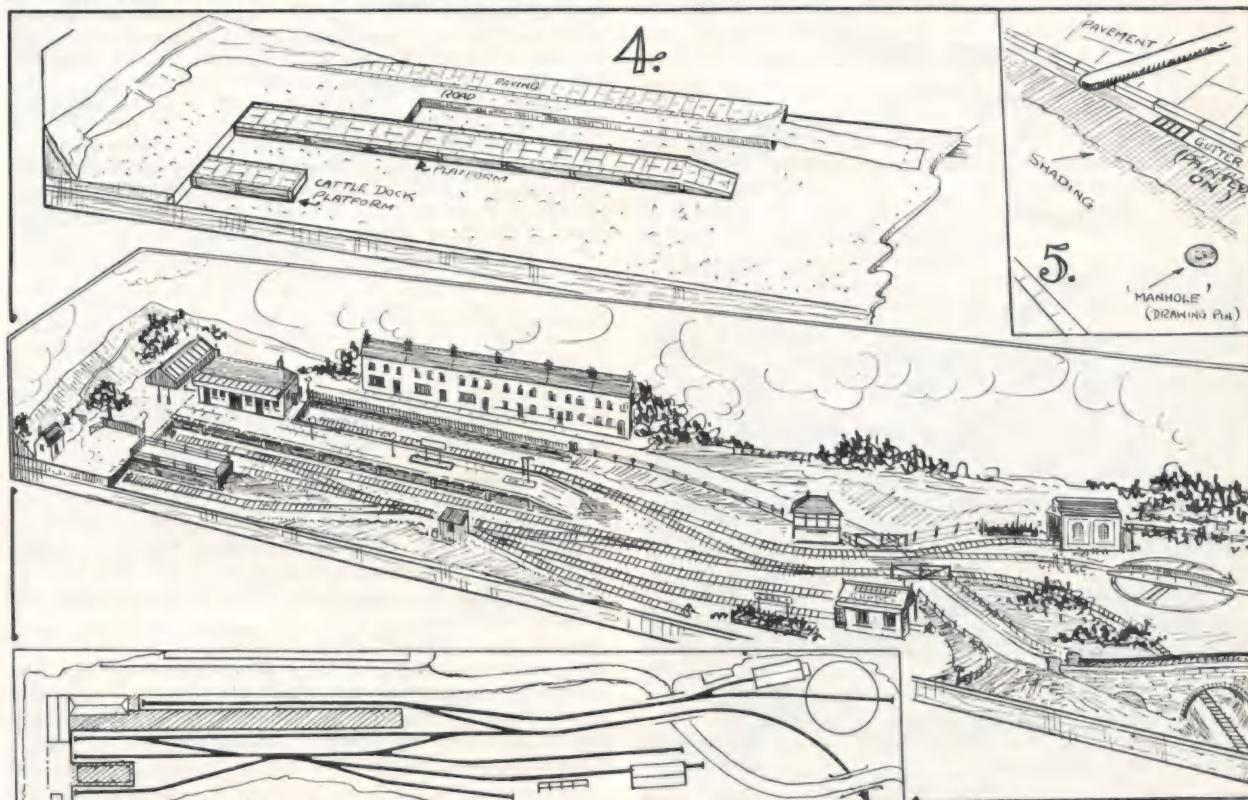
I know of 'expert' writers who have never built a model in their lives, but that does not stop them being 'expert'.

I don't want to make comparisons between the engineering and the scenic side of layout building, but they have one thing in common. Each is the striving for a miniature likeness of the real thing. This sounds too trite. But consider that, although every loco builder strives for utter realism, scenic workers will quite gaily build structures that would hasten a surveyor to his grave, or country landscapes that would send a farmer into hysterics.

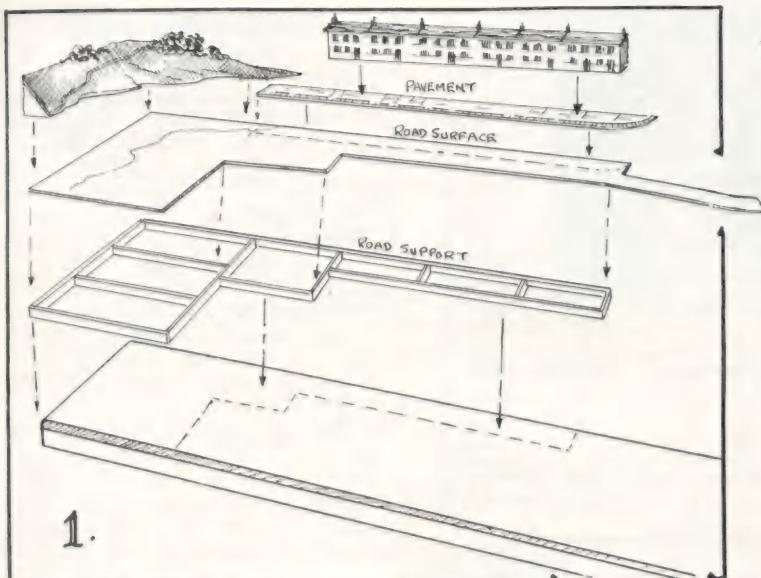
## ON THE LEVEL

Let us get back to my two acquaintances. They had built a jointly shared layout with the conventional station, from plans seen in a magazine. They had observed that the platforms of most station buildings are level with the road and pavement but, of course, not level with the railway track. In other words, instead of being just stuck on top of the baseboard any old how, the platforms are built into the layout in a rather complicated way.

Now both of them had extensive model railway libraries, but nowhere could they find the slightest reference to this almost universal feature of our railways. Of all the layout descriptions







over the years, not one writer mentioned any method of building the road up to the right level, though 'dozens of writers referred to the "usual methods" which apparently are unusual enough never to have appeared in print.'

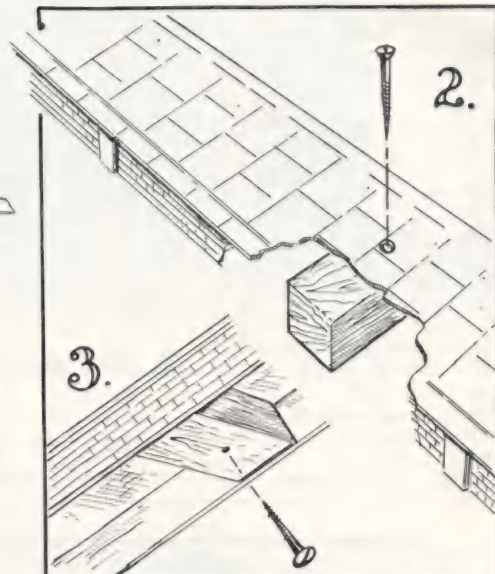
It appears that because it is a comparatively simple job to build a street up to platform level, nobody had thought it worth writing about. And there must be dozens of similar jobs which have never been described. Yet there can still be a *right and wrong* way of tackling them.

Lacking information, my two friends made their road by what appeared to be the logical methods, ie with thick soft-board. Then, finding that the road was not quite high enough, they plastered some Alabastine on top to bring it up to platform level. The result, which involved hours of 'messaging about' was a thoroughly uneven and badly finished road, and a structure which weighed twice as much as it should do.

## A USEFUL METHOD

A better alternative is to build the road of card or Sundeala, firmly glued to a light wood or very stiff card framework, as shown in the 'exploded' sketch 1. The underneath and edges of the card should be coated with old paint to keep any damp out, and the whole structure either firmly stuck to the baseboard or screwed from underneath.

The top of the card will then be painted with thick white undercoat, well stippled with the brush, and when dry it is



painted thinly in light grey, to give the appearance of dusty tarmac. And, incidentally, while we are on the subject of tarmac or roads and pavements of any sort, note that they are surprisingly light in colour, except perhaps when the weather is wet. Don't take my word for it—have a look. Better still, take a few odd pieces of card out of doors with you, coloured various shades of grey. You may be in for a surprise, and I think it will prove that you can actually walk on a surface for years and still not notice its correct shade or colour—until you have to.

You will no doubt use Airfix station platforms and, as these are light grey, this will only need a thin even wash of dirty turps to make them appear completely natural. They are screwed into place as in figure 2, or from underneath, via blocks wedged or glued in place with polystyrene cement, as in figure 3.

## FIXING THE PLATFORM

In figure 4 I have shown the platform,\* road and pavings actually in place. If the pavement is adapted from an Airfix platform top, it will have to be stuck down, and this can be done with a fairly liberal amount of polystyrene cement. In figure 5 you will note that the rounded end of a penholder or brush is pressed down and run along the road edge to give an impression of a gutter. This should be done while the grey paint is still wet. Note, too, that the road can be shaded a slightly darker grey for about one-third the width nearest to the back of the layout. This will give an impression of a camber, sufficiently realistic when viewed from the front of the layout.

I have included the completed station and trackwork as a matter of course. A station of this sort can be used with a fiddle yard, or with a small terminus such as one of those which have appeared previously in AIRFIX magazine. And, though I have been busy ticking other people off, it has just occurred to me that I could possibly give some more information about over-bridges like the one shown in the layout sketch. Common faults are that: (a) the approach to the bridge is too steep, and (b) that there is usually an acute and dangerous right-angle turn into many model bridges. To overcome this as much as possible, the approach road should be carefully planned so that it does not go either directly *across the layout*, or *lengthways*. If the approach is *diagonal*, as shown in the plan, curves will be easier, and there will be a reasonable amount of space to allow for a gentler gradient.

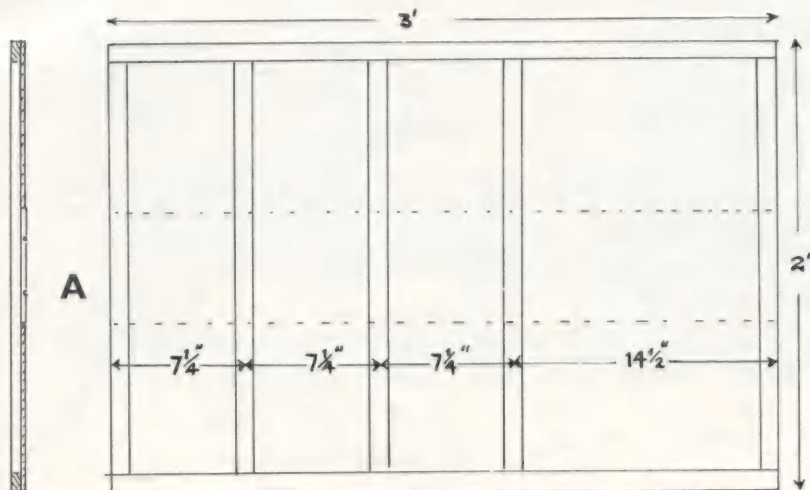
## Enter the AIRFIX magazine Model Photographic Competition now!

AS readers will see from pages 372 to 375 this month, AIRFIX magazine is running an exciting model photographic competition. When entering, remember to make your entry on the official form published in the July, August or September issues of AIRFIX magazine (one appears on page 373 this month). Extra entry forms are available from your local Airfix stockist.

Please ensure that your entry form is accompanied by either an Airfix kit box top or header, or an Ilford film carton, or an entry coupon cut from any of the competition issues of AIRFIX magazine. The special coupon appears this month on page 387.

For extra information, read the rules and general notes carefully.





# **Wheelspin** BY BERT LAMKIN

## How to save time in setting up your slot circuit

IN the June issue I suggested using a hardboard base for the start-line area of a model racing layout. This would save time setting up the circuit for use, and at the same time allow a lot of extra detail to be incorporated. Here is a more detailed description of a practical application of the idea, using standard Airfix accessories.

The base frame is constructed from  $1 \times \frac{1}{2}$  inch wooden battens, as shown in sketch A, the cross members coinciding with the joins in the track sections. If you are a good carpenter, the battens can be fixed by half-lap joints. Failing this, join them with glue and screws. Being end-grain, you will need a 2 inch No 5 or 6 wood screw, with a clearance hole drilled through the side members.

With the wooden frame complete, you can now fit to it one terminal straight, one lap counter, plus one standard and one double length straight track section. A small hole is drilled at the end of each

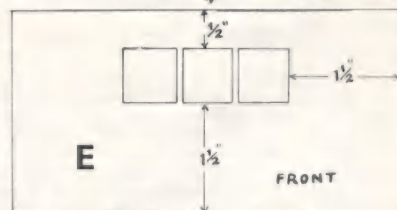
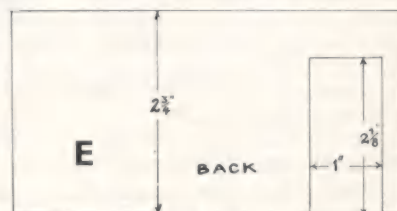
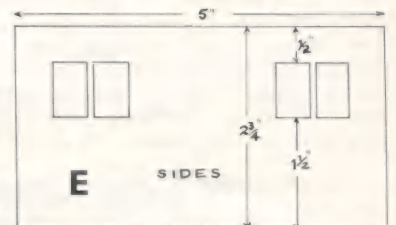
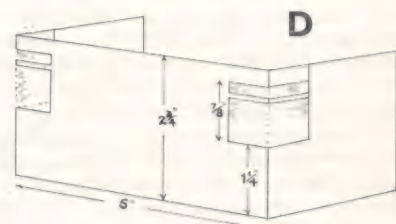
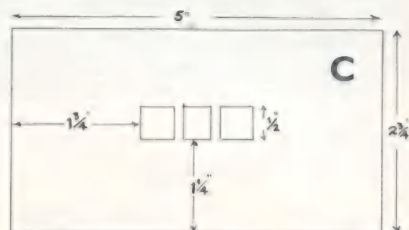
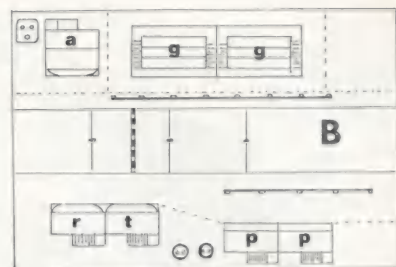
piece and countersunk to take a  $\frac{1}{2}$  inch No 4 screw.

The track sections are laid centrally on the frame, leaving a 9 inch space along either side. This is then covered by pieces of  $\frac{1}{4}$  inch thick insulation board or a double-layer of hardboard, using Evostik and panel pins to attach it to the frame. Gaps between board and track can be filled with plastic wood or Polyfilla. The whole surface can now be painted. I have found Dulux dark grey undercoat suitable for a tramac effect. Make sure you do not cover the conductor strips; a small model-cleaning brush is the tool for the tricky bits.

### Painting a start line

When the 'ground' is dry, paint a start and finish line about a car's length ahead of the lap counter triggers. The line can be a series of alternate  $\frac{1}{4}$  inch black and white squares. Short white lines at right-angles can indicate the 'grid' positions.

To keep the unit self-contained, the power unit and controller sockets are also mounted on the baseboard. The power supply is masked by the press building (marked a on plan B). A 5-amp, 3-pin socket is also fitted near the power unit for the mains supply, and all the wiring is laid under the baseboard with



*None of the drawings with this article is to the same scale, but all are keyed and referred to in the text.*

AIRFIX magazine



connections soldered to the track direct.

You will see on plan B how the buildings, etc., are sited, with the 'drivers' behind the pits. Working outwards from the track, the first items to make and fit are the protective barriers in front of the pits and grandstands. These can be made from strips of card glued to wooden posts inserted into the base. Alternatively, the standard Airfix barriers may be used.

Now the pits, p on plan B, can be assembled. These are the standard Airfix kits and are made according to the instructions. Other trackside buildings follow. The timekeepers (t) and race control (r) buildings, are constructed from pit and press box kits as follows. The pit sides and back—parts 1, 3 and 2—are cut down to be level with the roof—part 4—which has the front wall removed. The timekeepers' building also has the forward extension of the sides cut away and a new front cut from plastic card (as shown in sketch C) fitted. The window shown is 'glazed' with Perspex.

### Timekeepers' box

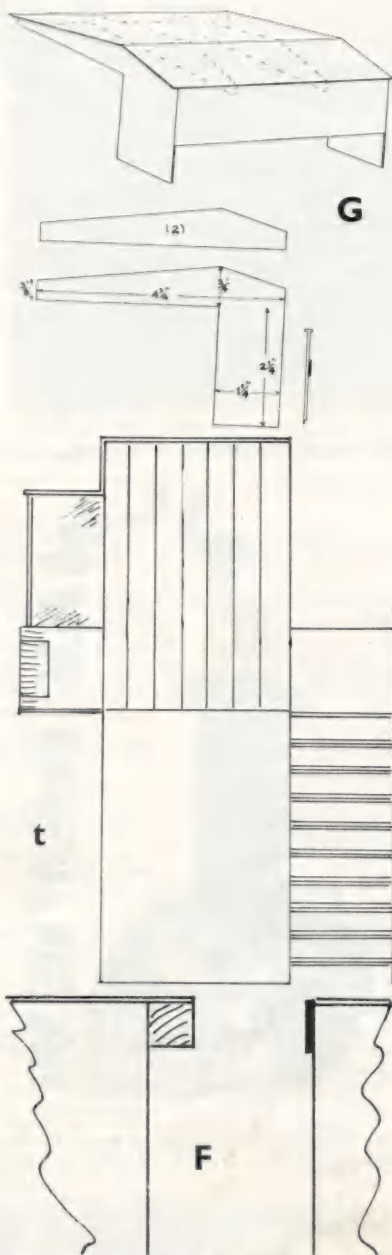
The steps can now be cemented into position. To complete the timekeepers' box (see sketches t and C), a standard press box is assembled, following the usual instructions, and cemented into position on the flat roof of the modified pit, allowing the bay window to project beyond the front wall.

For the race control building, the new front incorporates two corner windows as in sketch D. The top part is yet another press box kit. All windows are fitted with thin Perspex 'glazing' and the pit flagpole transferred to the roof.

The buildings are attached to the main base by means of small blocks of wood cut to the building's inside measurements, that is approximately  $4\frac{7}{8} \times 2\frac{1}{2}$  inches. The blocks are glued in position and the building slipped over them. The blocks should be a tight enough fit within the buildings to keep them in place for normal handling, yet leave them easily detachable when necessary.

### Plastic press box

The press building on the opposite side of the track is again made from the standard kit and plastic card. But, because it houses the power unit, it is enlarged. Sketch E gives the details of plastic card walls and windows. Cut out the doorway in the back and cement a separate piece of card across inside to represent the door. Reinforce the



corners internally with  $\frac{1}{8}$  inch thick balsa strip.

To create an impression of the thickness of the roof, if its top is to be flush with the top of the walls, cement a  $\frac{1}{4}$  inch thick strip of card along the walls, see sketch F. Alternatively, cut the roof  $\frac{1}{2}$  inch longer and wider and cement a  $\frac{1}{4}$  inch square piece of balsa under the overlap all the way round. The walls can then be covered with brick paper as a change from the concrete of the other buildings.

Complete the press box kit and cement

into position on the roof with the front walls in line. Steps from a pits kit are fitted to the rear wall, and because of the extra height they are mounted  $\frac{1}{4}$  inch below the roof surface and stand on a small 'concrete' block. This, in effect, creates two extra steps. The small pegs in the inside of the treads are inserted into holes in the rear walls. The back wall of a pit can be used as a template. Finally, a handrail is fitted round the rear half of the roof, made from balsa strip and using the steps rail as a pattern.

### Fitting the fences

Before installing the press building, the fences shown as dotted lines in sketch B should be fitted. On full-size circuits these are almost invariably chestnut palings about four feet high, and close enough together to prevent dogs and children getting through. Details of a suitable fence were given in a previous Wheelspin article. With the fences in position the press building can be installed, using small fillets inside to hold it in position.

Now the grandstands—g—can be made. These are standard kits with the addition of a roof. This is constructed from plastic card and comprises the two sides, back, front, roof and roof supports. These are all shown in sketch G.

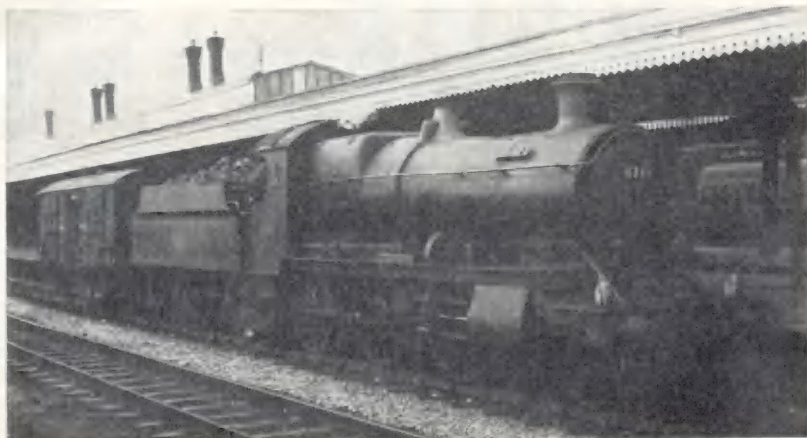
### Stand assembly

Firstly assemble the grandstand as per the instructions, and then add two strips of card to the sides, as shown in section. These are to compensate for the width of the handrail when positioning the top sides. Cement the actual roof pieces to the roof supports. These are spaced 3 inches apart and  $2\frac{1}{2}$  inches from the sides. When they are set, the front and back can be attached. These, being slightly shorter, come within the actual sides and under the roof. When the cement is dry the sides can be fitted. With these in position, the roof should overlap slightly.

Finally, cement the roof unit into position on the stand, taking care to support the front of the roof while the cement is drying. The original flagpoles and loudspeakers can then be attached. Various details, such as gutterings and drain pipes, can now be added to all the buildings and painting will, of course, depend upon your own taste.

With the miniature figures in position and posters and flags in the right places, the start area is operational, and should prove well worth the effort.





6361 is an example of the GWR 43XX 2-6-0s, the last survivor of which was withdrawn recently. Around five BR steam locos have been withdrawn daily since 1960.

IT is expected that all BR steam locomotives will be withdrawn by the end of 1967. In view of this, it is appropriate to take stock of the latest situation, but it must be emphasised that withdrawals take place at such a cracking rate that, in the inevitable time lag before information can be published, the situation can change rapidly. This survey is based on locomotives in stock at April/May, 1965.

At that time, British Rail had a fleet of 4,413 steam locomotives. This compares with over 13,000 five years ago, and over 20,000 at nationalisation in 1948. Since 1960, this makes an average of nearly five steam locomotives withdrawn every day! No wonder BR made £20 million from the sale of scrap in 1964.

The figure of 4,413 is made up of 3,208 locomotives of pre-nationalisation railway company designs, 839 BR standard locomotives and 366 of the former Ministry of Supply 2-8-0 'Austerity' locomotives that were taken into stock in 1948.

## LMS

Not surprisingly, former LMS locomotives figure prominently in the pre-nationalisation designs, and there were at the time of this survey 2,114 still in existence. Out of these, 623 are Stanier 2-8-0s and no less than 707 are Stanier Class 5 4-6-0s. The 'Black Staniers' have fared very well compared with some other classes, since 707 represents about 84 per cent of the original total. On the other hand, the comparable LNER B1 4-6-0s, which were a later design, now number only 158, about 38 per cent of the former total.

Former LMS locomotives are, of course, scattered over other Regions besides the London Midland, Scottish and North Eastern Regions for instance,

but when the Euston-Crewe electrification is completed next year it is to be expected that there will be many more withdrawals. Already the Royal Scot and Patriot 4-6-0s are down to two examples each, and the Jubilee to 29. The Duchess and Princess pacifics went last year. At the other end of the scale, the most interesting survivors are ex-Midland Railway engines, including two 0-4-0Ts, nine 0-6-0Ts of Class OF and 3F, and nine 4F 0-6-0s. The later LMS-built version of the Midland 4Fs, which at one time numbered nearly 600, are now down to 71.

Surviving 2-6-2Ts are represented solely by the 58 remaining Ivatt Class 2s, but there are 173 2-6-4Ts, made up of ten of the original Fowler parallel boiler design and 40 and 123, respectively, of the Stanier and Fairburn tapered boiler variety. 2-6-0s are represented by 26 Stanier moguls, 54 of the Hughes 'Crabs', 118 post-war built Ivatt Class 4s and 97 of the smaller Class 2s. One-hundred and twenty-nine 'Jintie' Class 3F 0-6-0Ts and four of the Stanier designed 0-4-0 saddle tanks complete the picture of former LMS locomotives.

## LNER

LNER locomotives generally have fared very badly, considering there were over 6,000 at nationalisation and there are now only 514. This, however, is understandable in view of the large-scale dieselisation which came early to the Eastern Region, and particularly the electrification and modernisation which took place on the Great Eastern section. Of 41 surviving LNER pacifics, there are still three A3s and 11 A4s. As stated earlier, there are 158 B1s, the sole representatives of LNER 4-6-0s. A point to note is that, whereas all former GNR and GER locomotives have long since gone, there are still 102 former



A1 Pacific 60131 Osprey at Kings Cross. Although this locomotive still survives, it can no longer be seen at this station as all steam locos are banned on the Eastern Region south of Peterborough.





**Top right:** V2, 60970, is another LNER survivor, photographed here at Stirling in 1963. **Bottom right:** The Bournemouth Belle is likely to remain steam-hauled until electrification of the line is completed in 1967. 35021, New Zealand Line, heads the down 'Belle through Farnborough, Hants.

NER locomotives, made up of 51 Q6 0-8-0s and 51 J27 0-6-0s, 44 GCR 04 2-8-0s and 34 North British Railway 0-6-0s of Classes J37 and J36. Other classes remaining include 39 V2 2-6-2s, 40 K1 2-6-0s, ten 01 2-8-0s (post-war rebuilds of the GCR 04s.), 23 J38 0-6-0s and 12 J94 0-6-0 saddle tanks.

## GWR

Only 435 former GWR-designed locomotives now remain, the largest class being 142 of the 57XX pannier tanks. The 210 94XX pannier tanks which were a much later design—some were built as recently as 1956—are now down to 22. There are still 127 4-6-0s, but most are now running without nameplates and some minus number-plates, too. The Granges and Manors seem to have fared best, with 39 Granges remaining out of 80 and 15 Manors out of 30, but Halls are now down to 68 and Castles down to five. It is interesting to note that, although the figure of 435 ex-GWR locomotives is small, this total is made up of 18 different classes, some, as can be imagined, in-imminent danger of extinction. The well-known 4575 Small Prairies, 43XX 2-6-0s and 14XX 0-4-2Ts were all extinguished recently, and likely to join them soon—since five or less locomotives remain—are the Castles, 2251 0-6-0s, 42XX and 5205 2-8-0Ts, 72XX 2-8-2Ts and the one remaining 81XX 2-6-2T.

## SR

The Western Section of the Southern Region is still the best area to see regularly steam-hauled main-line express passenger trains. Despite this, there are only 145 former Southern Railway locomotives remaining, and only 67 of these are genuine SR designs. Forty-five West Country/Battle of Britain pacifics and the surviving 21 Merchant Navy pacifics were largely rebuilt less than 10 years ago. Also included in the SR total are 12 ex-US Army 0-6-0Ts purchased by the SR in 1946, half of which are now in Departmental stock. The only pre-grouping designs still in use are the three former SE and CR Class C 0-6-0s in Departmental stock and the 16 ex-LSWR 02 0-4-4Ts on the Isle of Wight. Steam is likely to remain on the SR at



least until the Bournemouth electrification is completed in 1967, but whether the five remaining S15 4-6-0s, ten N and seven U 2-6-0s and six Q1 0-6-0s will last this long is anyone's guess.

## BR Standard locomotives

BR Standard locomotives now number 839, representing about four-fifths of their former total. They were all, of course, comparatively recently built, the first being the Britannias introduced in 1951 and the last the 2-10-0s introduced in 1954. Notwithstanding their recent introduction, 38 of the 2-10-0s have been withdrawn, including the last BR steam locomotive built, 92220 *Evening Star*, no doubt to safeguard it for its scheduled preservation. The one three-cylinder pacific, 71000 *Duke of Gloucester*, went some while ago, and the ten 'Clan' light pacifics are now down to four, otherwise there have not been any major inroads into BR standard classes. Two even are intact—the 20-strong Class 3 2-6-0s introduced in 1954 and the 55 Britannias.

It is suggested these days that admirers of the steam locomotive are sentimentalists standing in the way of progress. This, I think, is an over-

simplification. What most steam fans wish is that just a fraction of the vast sums of money spent on new diesel locomotives could have been spent on maintaining and keeping up-to-date the best of BR's stock. Locomotives are expensive and valuable items, and it is not entirely sentiment that is aroused when a dirty and badly maintained loco is seen clanking along in the hands of an unsympathetic crew.

Not that I don't sympathise with the crews—I do indeed. It must be very difficult for a fireman who has had a diesel turn one week and is expected to shovel tons of coal the next. I can't help thinking that the French have shown the right approach. Their remaining steam locomotives are concentrated in a limited number of areas, and they still receive the benefit of careful maintenance. As electrification spreads throughout the country, remaining pockets of steam are giving way, until eventually they will disappear altogether. In the meantime, steam locomotives, some far older than those running on BR, look clean and polished and put in a good day's work.

I don't call this sentiment, just plain commonsense!



# Modifying the Beaufighter

**Alan W. Hall describes a conversion for the beginner with the Airfix Beaufighter kit**



**STAGE 1** Construct the kit according to the instructions supplied. Join both fuselage halves, fill all joints and torpedo location holes under the fuselage with body putty. Similarly complete the assembly of the wings and undercarriage members. Change the propellers for two from a Sunderland kit if these are available—you won't be wrong if you don't do this but the aircraft described in this conversion had spinners; an earlier machine shown in the photograph on the facing page has not. Leave all assembled parts for at least 12 hours to ensure that the joints have set.

**STAGE 2** Cut off the nose 3/16th inch from the front of the canopy, and file the section left until this is absolutely square. Cut off the leading edge of the fin 5/16th inch from the leading edge. File a flat surface on the fuselage dorsal line from the base of the fin to within 3/8th inch of the dorsal turret.



**STAGE 3** Cut out a fin fillet from 1/8th inch balsa sheet and shape this according to the plan. Glue into position and add body putty to the joint where this meets the fuselage. The nose radome is made from 5/8th inch dowel rounded and cut to shape with a knife, file and fine sandpaper, referring to the plan for the exact shape. When sticking both the fin fillet and the radome to the rest of the fuselage I used balsa cement. Experience has proved that this makes a better joint between plastic and wood. Leave the whole assembly aside to dry out thoroughly.



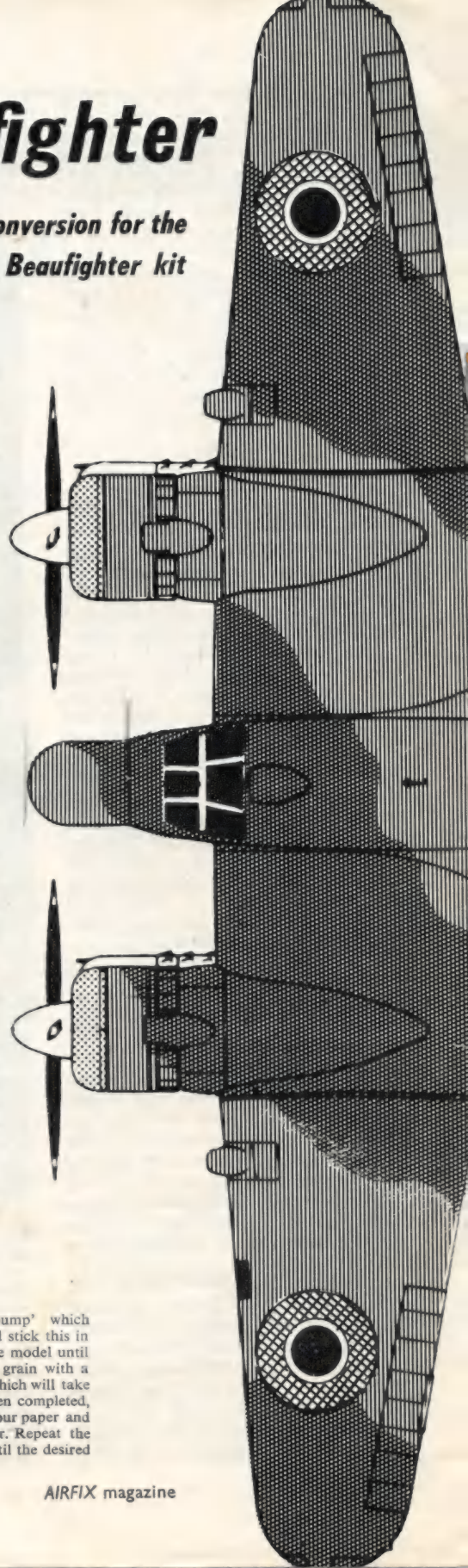
To jump in at the deep end by trying to do a difficult conversion can often lead the beginner and the younger model maker to give up altogether. I am therefore attempting, in the next few articles in this series, to provide some very simple examples with which readers who have not attempted a conversion before might be persuaded to start.

Once you have made one attempt at cutting up an existing model and successfully produced something that differs from the standard you will, without doubt, want to do more. It is a fascinating hobby and one which provides the variety lacking in just sticking the standard parts together and painting the result.

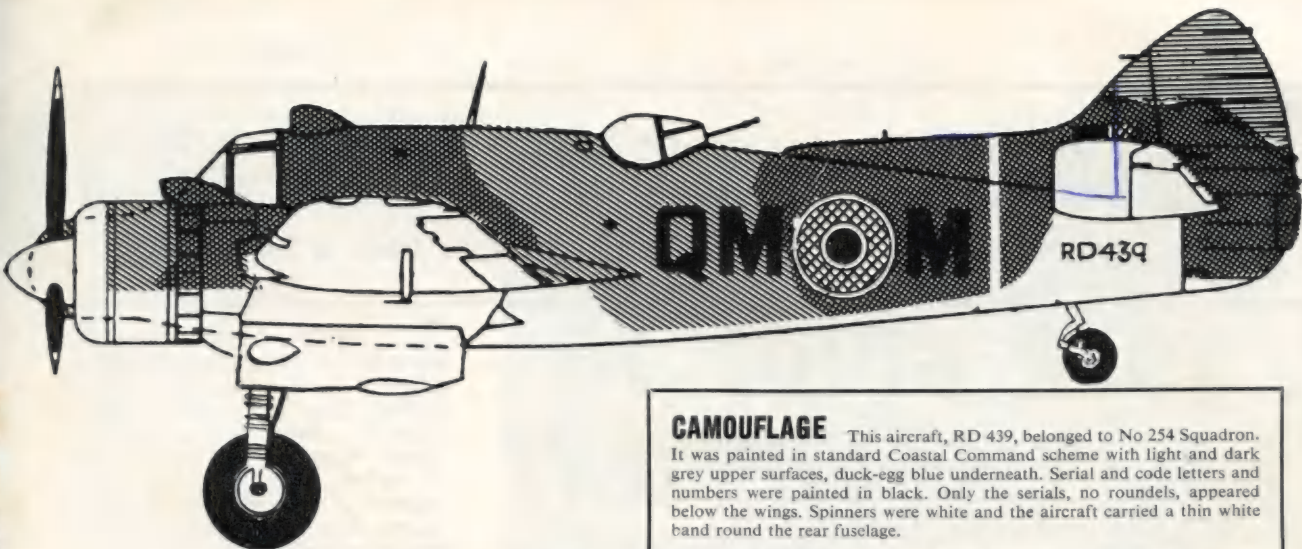
For my first example I have modified the Airfix Beaufighter kit. This is ideally suited to conversion into a Mark X, and the work required centres on the fuselage. Airfix have recently revised this kit by the addition of panel and rivet lines and it is now, in my opinion, an excellent model well worthy of further attention by the conversion enthusiast.

Basically, the work involved requires a new nose, revised fin shape and additional 'bump' just aft of the cockpit canopy. *Aircraft of the Fighting Powers Volume 6* provided me with the basic information I needed and this, plus the photographs in William Green's *Fighters of the Second World War* and a three-view drawing in the *Aeroplane Spotter* for July 27, 1946, added the details.

**STAGE 4** Shape the additional 'bump' which appears behind the canopy from balsa and stick this in position. Sand and file all new parts of the model until these fit exactly to the plan, then fill the grain with a mixture of talcum powder and clear dope, which will take about two hours to set. Once this has been completed, polish the resulting surface with the finest flour paper and eliminate any tiny cracks which may appear. Repeat the process using more dope in the mixture until the desired smooth finish is attained.







### CAMOUFLAGE

This aircraft, RD 439, belonged to No 254 Squadron. It was painted in standard Coastal Command scheme with light and dark grey upper surfaces, duck-egg blue underneath. Serial and code letters and numbers were painted in black. Only the serials, no roundels, appeared below the wings. Spinners were white and the aircraft carried a thin white band round the rear fuselage.

1:72 SCALE



### STAGE 5

Complete the assembly of the wings to the fuselage and the tailplane to the rest of the tail unit. Stick the canopies in position. Add the tail wheel, radio mast and underwing rocket rails if desired. The wing-to-fuselage joint will need some attention as this is not a perfect fit, and to make a better job should be sanded until the joint is completely invisible.

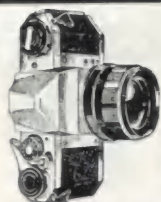
### PAINTING AND TRANSFERS

Camouflage instructions are contained elsewhere in this article. The code letters on the fuselage sides came from a 3/8th inch Yeoman sheet and the serial numbers were made up from Letraset. National insignia came from HisAirDec English transfer sheets, but you can use those provided with the kit, with the exception of the above-wing roundels which are red white and blue.

*This photograph of a Beau-fighter TFK belonging to No 254 Sqn shows how easy it is to get things wrong. Although a standard aircraft, it lacks spinners and the bump behind the cockpit. But aircraft in the lower left corner have these modifications. (Flight International photo).*







# FOCUS ON MODEL PHOTOGRAPHY

Use your skill to win £100-worth of prizes—read these details of how to enter

## YOUR GUIDE TO BASIC EQUIPMENT

By Bill Jay,  
of Ilford Limited

LET'S get it straight right from the start. The production of first-class photographs of your models is not difficult, or expensive, once you have a smattering of know-how and a minimum outfit of photo-equipment.

You will quickly glean the know-how from the special series of articles on model photography currently appearing in *AIRFIX* magazine. But what equipment do you need for effective model studies? Don't worry. There is no need for expensive, complicated or elaborate set-ups. Here is a list of the basic outfit with which you will be able to tackle any model: a camera, close-up attachment, tripod, cable release, two lamps, exposure meter, and a film.

Many of you will already own the majority of the items on this list. The remainder are either cheap to buy, or can be borrowed or improvised. Let us take a closer look at each item and discover its purpose, and any problem that it may present in practice.

**Camera.** Any camera, literally, can be used for pictures of model boats, planes, cars and trains. Obviously, if your camera is a box type with a fixed focus lens, you will not be able to shoot powerful close-ups of the models. But this can be overcome by asking someone to hold the model, which will give scale to the construction as well as 'fill in' the rest of the picture area.

Without a doubt, the best type of camera for model photography is a single lens reflex. The major advantage of this camera is that you see in the viewfinder exactly the image that will appear on the negative, even at very close working distances. This is not true with other types of camera, since the

displacement between viewfinder and lens leads to parallax error.

Another advantage of SLR cameras is that they often focus down to 2 feet or even 1 foot, without the aid of close-up attachments. A modern single lens reflex camera can cost anything from £40 upwards.

**Close-up attachments.** It is a fair bet that the majority of you will own



*The biggest single cause of unsharp pictures is camera shake. For crisp, clear pictures of your models, mount the camera on a tripod and fire the shutter with a cable release.*

cameras that fall somewhere between the two types already mentioned—the simple box and advanced single lens reflex. Your camera will probably have an optical 'straight-through' viewfinder and focus down to 3 feet. You must get closer to your models than one yard for

effective studies. So take your camera along to your local photo-dealer and ask him to fit it with a close-up lens. He will probably give you a choice of three. A number 1 close-up lens will enable the camera to focus down to 1 foot 6 inches; a number 2 down to 1 foot, and a number 3 down to approximately 9 inches. Each lens will cost about 12s, complete with holder.

The big problem about working this close to a model with an average eye-level camera is parallax error—the difference in the field of view between viewfinder and lens at close working distances. Make allowances for this error, otherwise you will 'chop off' part of the model in your picture. For example, if the viewfinder window is above the camera lens and displaced to its left (when looking at the back of the camera body) you must deliberately position the model to be visible in the lower right-hand corner of the viewfinder.

**Tripod:** A pile of books will *not* do! A tripod quickly justifies its cost in sharper, crisper pictures. The tripod must be firm and free of 'whip'. To test a tripod for this vice, extend it to its limit, press on the camera platform, and twist. There should be no (or very little) play in the legs.

On polished or tiled floors, the legs of the tripod are inclined to slip, and spread-eagle. Anchor the legs with a three-pronged chain, or string, each arm tied to a tripod leg and joined in the centre.

For greater versatility, buy a ball and socket head for your tripod, which will enable you to manipulate the angle and tilt of the camera precisely without disturbing the tripod.

**Cable release:** As its name signifies, a cable release is a flexible 'finger' by which you can fire the camera shutter without the risk of a shake-inducing jab of the finger. Without a doubt, the greatest single cause of fuzzy pictures is an unsteady camera at the moment of exposure. A cable release costs about 7s 6d.

**Lamps:** There is no need to buy an expensive photographic lighting stand

*Continued on page 375*

*AIRFIX magazine*



# ENTER THE **AIRFIX** magazine Model Photographic Competition

Run by **AIRFIX** magazine, with over £100-worth of prizes donated by Ilford Limited and Airfix Products Ltd

Many plastic modellers are keen photographers, and find that the two hobbies have a lot in common. To promote interest in both subjects, **AIRFIX** magazine is running a free model photographic competition, with the assistance of Ilford Ltd and Airfix Products Ltd. The rules of the competition are simple—and all you have to do is to submit your pictures, with a chance to win a valuable prize.



THESE  
ARE  
THE  
PRIZES

**FIRST** Ilford Elmo 8CZ ciné camera

**SECOND** Ilford Rangefinder  
35 mm camera kit

**THIRD** Ilford Sportsman 125  
35 mm camera

These three prizes have all been donated by Ilford Ltd. In addition, Airfix Products are providing 25 consolation prizes of Airfix kits to the recipients' choice.

To help entrants, special articles on model photography will appear in the July, August and September, 1965, issues of **AIRFIX** magazine. Subject to space being available, it is hoped that the three winning entrants will have their photographs (and possibly also their winning models) displayed in the model department of Gamages, in London. The prize presentation will also take place in London, and more details of these two events will appear later in **AIRFIX** magazine.

## RULES AND CONDITIONS OF ENTRY—PLEASE READ CAREFULLY

- (1) The competition is for black and white pictures only—there is no category for colour prints or transparencies.
- (2) The competition is not open to professional photographers, to the employees of Ilford Ltd, Airfix Products Ltd, or to their associates or agents, or **AIRFIX** magazine.
- (3) All submitted photographs must show at least one assembled Airfix model. It can be photographed either against a plain background or in a scenic setting.
- (4) Photographs will be judged on their general merit and subject matter; but the entrant's age will also be taken into consideration.
- (5) Prints, not negatives, should be submitted (although negatives may be required later). Photographs must not be smaller than En-print enlargements (3½ inches square, or 3½ inches by 5 inches, according to negative size), and must not be larger than 12 inches by 10 inches. Prints should be securely packed with cardboard.
- (6) Entrants must ensure that negatives of their pictures can be made available at the conclusion of the competition if deemed necessary by the organisers. Actual models must not be submitted.
- (7) It is a condition of entry that prize-winners agree to their pictures being used for publication and/or publicity purposes without a fee by **AIRFIX** magazine, Ilford Ltd or Airfix Products Ltd.
- (8) Entries can only be returned when accompanied by a stiff-backed, stamped-addressed envelope of adequate size. No responsibility can be accepted for loss or damage to prints.
- (9) Each entry must be accompanied by an official entry form taken from the July, August or September, 1965, issues of **AIRFIX** magazine, or available from your local Airfix stockist. Each entry form (below) must be accompanied by any one of the following: the official entry coupon published in the July, August or September, 1965, issues of **AIRFIX** magazine, OR an Airfix kit box top/header, OR an Ilford film carton.
- (10) All photographs must carry the entrant's name and address, clearly marked, on the back.
- (11) There is no limit to the number of prints that each individual can enter, but they must all be submitted at the same time and covered by the official entry form, plus coupon or box tops.
- (12) The judges' decision will be final, and no correspondence can be entered into concerning the competition. The closing date for entries is September 6, 1965. The entries will be judged by a panel of three—H. D. J. Cole, FRPS, AIBP (Manager of Ilford Ltd's Photographic Advertising Unit at Cricklewood and President of the Royal Photographic Society), the Chief Designer for Airfix products Ltd, and Darryl Reach (Editor of **AIRFIX** magazine).
- (13) Entries submitted that are not in accordance with these rules will be disqualified.

**Closing date for entries is September 6, 1965. The results will be published in the October issue of AIRFIX magazine (on sale September 22). It is also hoped to publish the three winning photographs in the October issue of AIRFIX magazine.**

## OFFICIAL ENTRY FORM

All entries should be addressed to:

**PHOTO COMPETITION,  
AIRFIX MAGAZINE,  
BRANDS HATCH CIRCUIT,  
FAWKHAM,  
DARTFORD, KENT.**

I enclose (in accordance with rule 9) either: Entry coupon cut from July, August or September, 1965, issue of **AIRFIX** magazine/Airfix kit box top or header/Ilford film carton (delete as applicable)

Name..... Age (if under 21).....

Address.....

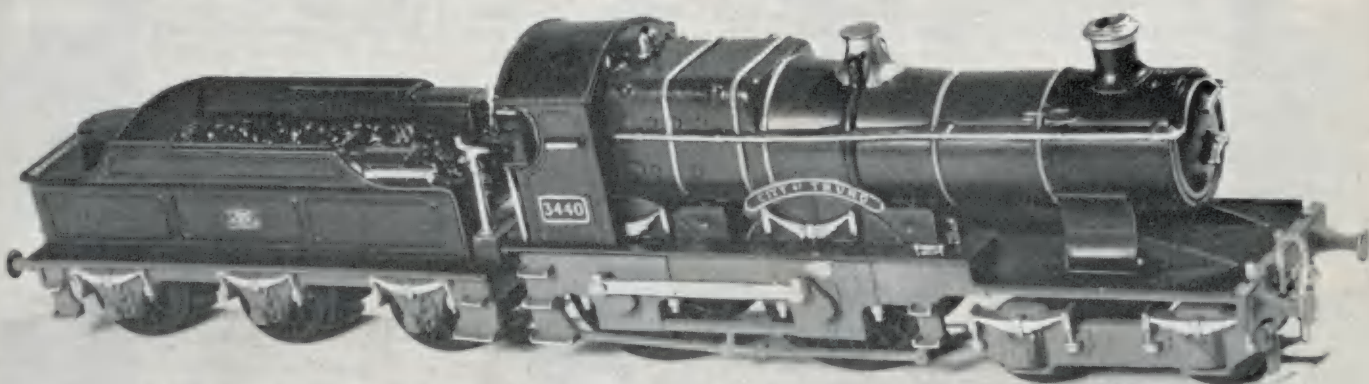
(CAPITALS)..... NUMBER OF PRINTS ENCLOSED.....

I have read, understood and agree to abide by the rules of the **AIRFIX** magazine Model Photographic Competition. I am not a professional photographer.

SIGNED..... Date..... (A)



# ILFORD FP3 - FOR YOUR PRIZE-WINNING PICTURE



You understand the importance of detail in model making, Ilford understand the importance of detail in photography. That's why they make Ilford FP3—the fast, very fine-grain film that's superb for enlargements. When you've made your model, make sure you do it justice. Capture all the detail and all the quality on Ilford FP3. Come on, the prize is practically yours.

And don't forget the other great Ilford black and white films for other jobs:  
HP3: the fast film that produces fine prints indoors or outside.  
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Selochrome Pan: fast film for outdoor work or for use with flash.

...shoot for sure with

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## BASIC EQUIPMENT

*Continued*

for model photography—an adjustable reading light is ideal. Replace the normal household lamp with a photo-flood. A photo-flood lamp is over-run, which means that it is far more brilliant, but lasts for a shorter time. A photo-flood bulb costs about 7s 6d and is available from any photographic dealer.

The extra illumination thrown out by a photo-flood is useful for two reasons. It allows you to use a shorter exposure time, which will 'freeze' camera movement and lead to a sharper picture. Secondly, it will permit a small aperture, such as f/16, to be set on the camera for maximum depth of field. This means that your model will be all-over sharp. Don't forget that a slide projector—without a film in the gate—can make a very effective main source of light for photographing models.

Whenever possible, always position another light close to the camera in order to 'fill-in' the otherwise dense shadows cast by the main light. This makes for a soft, natural lighting effect.

**Exposure meter:** Never guess photographic exposures. That's the sure road to dud pictures.

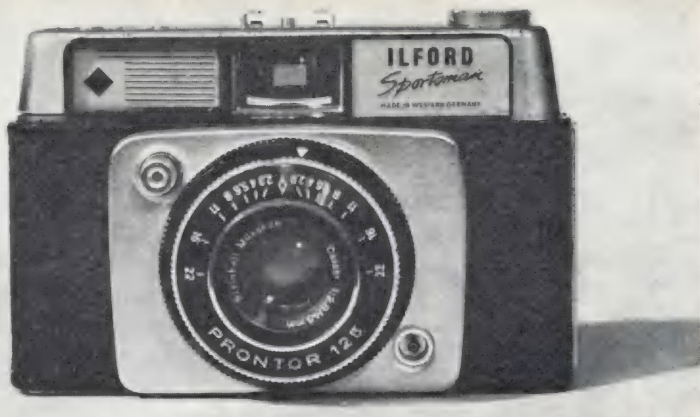
A leaflet supplied by the photo-flood manufacturer will give you a guide to the correct aperture and shutter speed combination to set on the camera controls, but by far the most reliable method for assessing spot-on exposures is a photo-electric meter. Costing from £6-£10, an exposure meter may seem expensive, but it soon repays its cost in otherwise wasted film.

One important point: always take your meter readings close up to the model. A general meter reading from the camera position will mean that its cell is over-influenced by the surroundings and this often leads to disappointing results.

**Film:** The best film for model photography is a medium-speed emulsion, such as FP3. This will give you a good compromise between sharpness, grain size, tonal range and latitude. Even from small negatives you can obtain big enlargements of high quality from this film. Another advantage is that a medium-speed film can be 'abused and misused' and still come up trumps with a sharp, clear picture.

If you do run up against a seemingly insurmountable problem in your photography, drop a line to Amateur Service Department, Ilford Limited, Ilford, Essex, where there is an experienced, trained staff at your disposal.

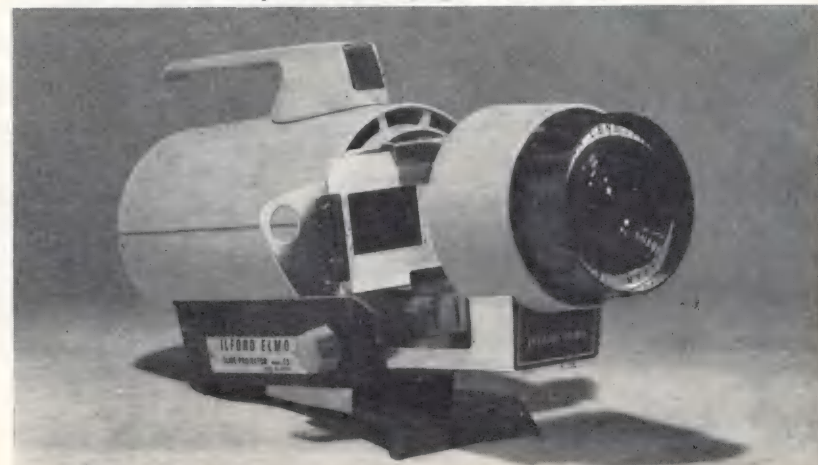
August, 1965



**Above:** A typical 'eye-level' camera, as used by thousands of amateur photographers. This type is ideal for model photography if fitted with a close-up lens, obtainable from any photographic dealer for about 12s. But remember that the viewfinder 'sees' a different field area from the camera lens at close working distances, and you must make allowances for this parallax error when taking your picture. The camera illustrated is the Ilford Sportsman 125, which costs £12 17s 6d. **Below:** For spot-on exposures use a photo-electric meter such as this Weston Master V. An under- or over-exposed negative will not yield a top-quality picture of your models.



**Below:** No need to buy expensive or elaborate pieces of equipment when photographing models in your own home. Improvise. Remember that a home slide projector makes a very efficient source of powerful illumination. The slide projector illustrated is the Ilford Elmo CS model, which retails at £14 19s 6d complete with carrying case and lamp.







*Fiat G91T, MM6320, wearing grey and green camouflage with silver undersurfaces and dayglo on her wing tips, tail surfaces and nose. The rear fuselage legend reads 'MM6320', beneath which appears 'FIAT G91T/ING50'. Standard Italian Air Force roundels are carried. Some useful colour-guide sketches by M. J. F. Bowyer appear on page 385.*

**P**RESENT-DAY trends in aircraft colour schemes were much in vogue at this year's Paris Aero Show, and it was in consideration of this aspect particularly that Profile visited the Show during its first few days. Camouflage for brushfire wars where it may be a vital aspect of success, a colourful marking scheme to attract attention, special finishes for specific purposes, all could be seen on this occasion. Bearing in mind their value to modellers, we offer this survey.

Undoubtedly the re-introduction of camouflage is the most noteworthy recent feature of modern military aircraft markings, and at Paris it was a surprise to find a McDonnell RF-101C Voodoo, 60107 from the 66th Tac Recon Wing, Laon, in a dark brown and dark green finish, with matt white undersurfaces and a black fin serial. Absent was the usual multitude of writing on its walls, and it presented a most unusual sight, for it is so many years since camouflage was common to American fighters. Apparently, others at Laon also wear the new scheme, which seems sensible for low-level rôles. Brown and green, however, has been outmoded now that many operational tasks take place in part over the sea, hence the glossy grey-green-silver colouring of the Mirage IIIR, No 331, whose colour tones seemed to be similar to those on British aircraft. Its roundels carried the narrow yellow outline generally applied to French military aircraft. Grey and green, with blue underside and areas of orange dayglo on its nose, wing tips and tail, characterised the ill-fated Fiat G91T, MM6320, whereas an Etendard IV M exhibited Aeronavale roundels on its dark grey upper surfaces and was white beneath. '68' also appeared on its fuselage in white.

Helicopters were an imposing feature in the sky and on the ground at Le Bourget, mainly from the US Army, which used a fleet of Bell UH-1s, including 38508, to commute with Paris. These were finished overall in glossy 'khaki green', a peculiar shade combining dark green with a tint of brown and producing a bronze sheen effect from certain angles. 'ARMY' boldly

appeared on their machines in white, with other inscriptions yellow. An interesting Bell UH-1D, 13569, carried details of 21 records held by the type, and an OV-1B Mohawk, 62-5899K, also had the standard colour scheme. It was also applied to the new bulbous Hughes OH-6As, 62-4213 and 62-4215, and to a UH-1B Iroquois, 62-8514, shown statically surrounded by guns and various offensive loads as carried in the Vietnam campaign.

Dayglo is now largely absent from American military aircraft, where once it was such a bold feature, possibly due to the likelihood of their being involved in conventional warfare. Five helicopters from the Westland stable were on show, including a

familiar grey-green-silver Whirlwind 10, XP299, with white serial and a Wessex HAS 3, XM328, dark glossy grey overall and with a hefty radome above the fuselage aft of the elongated rotor pylon. With it was another green and sand Wessex, XT417. Scout XR639 had the customary brown and green finish of Army helicopters and Wasp XT431 was overall glossy dark grey. A few other helicopters exhibited less well-known colouring, such as the huge SA 321 Super Frelon No 04, which was dark sea grey with a white top and F-ZWWI on its nose. Additionally, it carried Aeronavale roundels and dayglo areas. Another dark grey helicopter was the Boeing UH-46A of the US Navy, which had 150968, HU-4 and HT in white. Its unit crest portrayed a red and

white spear on a white shield and DET 97 in black. An Italian Augusta Bell 47G-3B-1, MM80348B, wore dark green colouring over its framework and the usual Italian Air Force roundels.

From the US Navy came what was probably the most interesting selection of shapes, at least to English eyes—to which they are a rare sight. Basically, all had light grey upper and white under surfaces. A group came from the USS *Saratoga*, whose coding AC in black graced their tails. It comprised a Chance Vought F-8D Crusader, 14870, of VF-32, which had black AC on its fin against a yellow base; North American RA-5C, 149311, a reconnaissance Vigilante of RVAH-9

# PROFILE

## Paris fashions: colour and camouflage



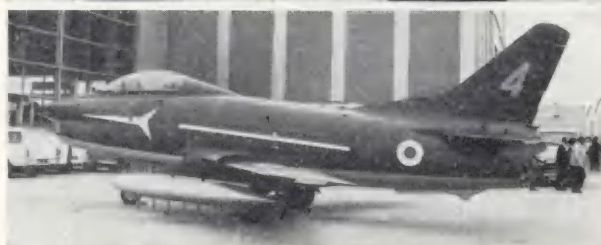
carrying 'NAVY' in light blue on its fuselage sides and dark green and black AC and lines on the fin. In spine-like manner it carried a long camera and reconnaissance gear pod under its fuselage. Its unit crest was carried on the sides of the engine intakes, the entrances of these being outlined in red.

Also off *Saratoga* was a Douglas A-4C Skyhawk, 149593. This had a white fin with AC in black between two narrow blue lines flanked in white. 05 appeared at the fin tip in black and 305 on the sides of the nose, whereon the anti-dazzle panel was black. The arrestor hook was white and black, and 305 in white was painted on the red inner sides of both flaps. A dark grey stripe was painted along the wing leading edge, and a blue flash on the fuselage. A white skull insignia on a blue diamond was centrally painted on the fuselage, wearing red and white wings, and from its black gun a stream of yellow bullets flowed. From VA-34, it was carrying its black figures and letters applied in black sticky tape instead of paint. Another Skyhawk carried a mock-up of the latest TA-4E two-seat cockpit. It was grey and white, with a dark blue band across its fin, and represented the planned variant in full-size model form, and could easily form the basis for a conversion of the Airfix Skyhawk. In another vein the large Breguet Atlantic was also wearing a grey and white finish.

Three McDonnell Phantoms were on show, an F-4C-22-MC 40724/64-0724A, grey with white underside, coded FJ-724 in black and featuring a black nose radome; F-4B 152256v *Gay Paree* of the Naval Air Test Center, Patuxent River, painted grey and white; and an F-4C 40699:FJ699 all light grey. This latter colouring was first common in Europe to the F-102s, and later to a few F-101 Voodoos which wore it as a special anti-corrosive scheme to prevent salt water spray damaging their skinning. Overall light glossy grey was also featured by the peculiar Lockheed HC-130H-105-LM 14853, with a black nose radome and an antennae-like contraption for snatching a survivor. It featured yellow and black trim similar to MATS aircraft used for other rescue purposes. A Khman HH-43B Huskie was also to be seen in RESCUE regalia, but this machine was basically in natural metal finish, like the MATS C-141 Starlifter, 38090, which had '1501st ATW' in red on its main-wheel fairings. A B-58A-35-CF Hustler was also silver but for the SAC nose band, black nose radome and serial 12069 on its fin. It carried no unit insignia.

Natural finish was featured by a number of aircraft, notably the Lightning F3 of No 111 Squadron, XR716, which was carrying Red Top missiles, silver with black nose caps and white stabilising surfaces. The Lightning's tail was black and yellow and on this the usual 'Treble One' motif appeared, with black and yellow flash on the nose. The aircraft's spine was black and aft of the canopy were yellow segments. A black 'F' was painted on the fin. Near to it stood a Dominie T1, XS711, silver with red dayglo. Like the Lightning, a CF-104 Starfighter, 12854, was displayed with highly polished natural finish and the usual insignia and RCAF lettering. 854 carried a beautifully applied crest of No 441 Squadron on the intake sides, and had white upper wing surfaces. An interesting item was its fin national marking, two upright broad red stripes bordering one white, on which was applied a red maple leaf. A new British paint scheme was exhibited by a Beagle Basset, XS767, which was glossy grey with a white fuselage top above a dark blue cheat line. Serials were black and the inscription 'TRANSPORT COMMAND' was carried on its nose.

Special finishes were much in evidence, as on the rich red Jet Provost T4, XP553, whose CFS flash appeared on its nose. Its small fuselage serials were black. Hunting H126, XN714, appeared in a rather drab shade of yellow, nevertheless bright enough to be seen some way off—and purposely painted to be



**Top to bottom:** DC-3 F-BEIE wears, to all intents and purposes, the livery of Air France, but is actually operated by the *Secrétariat d'Etat Aviation Civile*. Note the modification to the undercarriage, the white top, blue line and fin marking. Letters were all black. A Fiat G91 PAN of the national aerobatic team of the Italian Air Force, whose G91s have been specially modified and carry ballast in place of guns. Another view of the Fiat G91 PAN. Typifying the US Army contribution to the Paris Show is this Bell UH-1B, 63-8514, shiny khaki green overall with white ARMY and yellow lettering and rear fuselage band. Under the blue and white shield crest on the cabin side was printed EX ALIS PUGNAMUS.

evident. Looking very smart was a Fiat G91 of the Frecece Tricolori, officially designated Fiat G91 PAN. It was bright royal blue with silver fuselage under surfaces and drop tanks. The tank pylons were blue. On its fin appeared a gold figure 4, beneath which in straw colour was painted Frecece Tricolori. Three stripes with elongated arrow head were painted along the fuselage sides from the cockpit almost to the roundel, the uppermost being green, the next white and the other red. On the sides and above and below the wings appeared Italian Air Force roundels. 6254 was applied to the starboard nosewheel door in black and a red 4 appeared on the front nosewheel door. On the

*Continued on next page*





**Top to bottom:** A new coat for an old sight—the camouflaged RF-101 Voodoo wearing brown and green camouflage and white under-surfaces. Roundels were applied in the usual positions. Camouflage is also being applied to the Thunderchiefs in Europe, and seems likely to appear on other tactical rôle USAF machines. US AIR FORCE appears on the side of the nose in black. The F-8D Crusader, with grey and white finish and yellow tail stripes, had black letters and numbers. The mock-up of the TA-4E was grey and white with blue trim.

## PROFILE—Continued

third door was painted FIAT G91 MM6254. Spanwise stripes were applied beneath the wings and tailplane with green leading, then white and the red at the rear, altogether an attractive scheme for a model and one easily applied.

It is unusual to see military and civil markings painted side-by-side on the same machine, but a Malmö Junior SE-EFM had them on its dark green and blue scheme, the Swedish Air Force insignia being situated just ahead of the white letters. A battery of rocket projectiles hanging under the wings completed the oddity. The Swedes also exhibited a SAAB A32 Lansén, looking very dowdy in its dark green and grey finish, with very light grey undersurfaces. A white '49' had been applied to its fin and a yellow 15 aft of its national insignia.

Many of the small civil aircraft had highly individualistic paintwork, and one of the most startling was surely the red-white-blue overall striping of the Mystère XX F-WLKB. A number of civil French modified Dakotas came to and fro during the show, such as F-BEIE. These have undercarriage doors, yet retain all the markings of the Air France Dakotas of long ago—natural finish with mid-blue cheat lines and fin design, and white fuselage tops above the line.

Without doubt, the most memorable sight at the Show was presented by the array of Russian aircraft so unusual to Westerners. Basically the airliners of Aeroflot—the IL-18, IL-62, TU-124, TU-134, AN-12 and AN-24—all wore silver and white finish, upon which dark and light blue lines were added, in part with red trim. Yet it was surprising to find such variations in detail on each type of aircraft. The AN-24, for example,

featured two shades of blue and black registration and the Tupolevs had pale blue with red and white outlining to the concern's motif and cheat lining. To clamber aboard the IL-62 was, it must be admitted, quite an event, and it was surely the most interesting machine there—the colossal AN-22 had yet to arrive when I made my visit.

The Russian airliners had surprisingly modern decor, although the quality of finish was certainly not the equal of Western standards. Leaning out of the door by the centrally placed gallery of the IL-62 afforded a good view along the wing leading edge, with its kinks and bends looking most peculiar. Russia's VC-10 is a not-quite-so-elegant version of the British machine, proof of which was easily obtainable by crossing to the Ghana Airways example on show, 9G-ABP, which had light grey lower and white upper surfaces with all-grey wings and had a large freight door. Its blue cheat line was outlined in red and white.

No account of the Paris Show would be complete without mention of the gigantic Russian helicopters, the Mi-6 and V-10 flying crane. The former was painted in a slightly fawn shade of grey with very dark blue, black, white and silver lines. Its stub wings were encircled by bands of silver, white and black. The olive green stalky flying crane had a yellow lower area. Silver rotor blades with black tip stripes were fitted to the Russian machines. V-10 CCCP-04102 was carrying a box-like contraption, against which had been placed a curious lean-to for those few guests invited into it, doubtless to sample caviare and even more propaganda. One suggestion made to the attendants, nearly all of whom were little men in big suits, was that it would be useful for the holding of Party meetings when visiting the collective farms, but humour was a somewhat lacking quality in the Soviet delegation! Perhaps the most interesting exercise of all was to converse with the Russians, including the ever-smiling Yuri Gagarin. Or, more correctly, to attempt to converse for, although some French had been mutually acquired and there was a hefty Franco-Russian aviation dictionary to hand in the IL-62, the language barrier was as difficult to pierce as the holed iron curtain. If for no other reason, Paris was worth visiting to prove to oneself how great is this barrier between 'us and them'. Yet there are chinks—one of the Aeroflot pilots knew of Airfix kits.

M. J. F. Bowyer

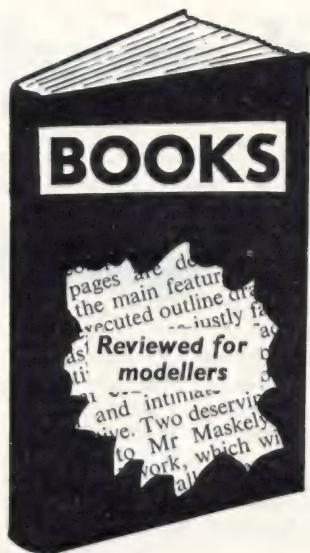
Two views of a typical example of the A-4C Skyhawk, 149593, the aircraft of Lt J. G. Steve Werlock. Note the refuelling probe.



AIRFIX magazine



# NEW BOOKS



## Valuable record

ABC BRITISH RAILWAYS—STEAM LOCOMOTIVES, and ABC BRITISH RAILWAYS—DIESEL MULTIPLE-UNITS. Published by Ian Allan, Terminal House, Shepperton, Middx. Price 3s each.

THE withdrawal of BR steam locomotives continues at such a pace that it is difficult to keep track of them. Fortunately a new edition of Ian Allan's ABC has been issued which shows the position towards the end of 1964. Some surprising information comes to light: for instance, out of the 5,269 locomotives listed there are as many as 641 Stanier 2-8-0s and 730 ex-LMS Stanier Class 5s, but ex-GWR, LNER and SR locomotives are down to 672, 618 and 171, respectively. (Railway Review also surveys surviving BR steam locos on page 368.)

The 96 pages of the book are crammed full with information, and approximately 85 photographs illustrate most of the surviving classes. This is a valuable record of the closing days of steam on BR and excellent value for the modest price charged.

A companion volume lists the numbers and gives brief details of all BR diesel multiple-units, ranging from the four-wheel railbus to the eight-car Blue Pullmans. The numbers quoted are those of the individual coaches, since BR do not use set numbers. This probably makes spotting a difficult job, but it will be a useful reference to the multiplicity of BR designs in current use. The 64 pages include 28 illustrations

## Complete coverage

THE COMPLETE BOOK OF MODEL RACEWAYS AND ROADWAYS by Louis H. Hertz. Published by Temple Press Books Ltd, 42 Russell Square, London, WC1. Price 42s.

GOOD books on model motor racing are few and far between, but this is the first of two to appear in quick succession recently. Comprising 216 pages, and packed with over 440 photographs, it can certainly claim to be something of a complete work on the subject. To most of us, raceways are a relatively new hobby, but the author of this book (who has written many other articles and books on modelling) admits in his introduction that he built his first slot car layout as long ago as 1937, albeit to complement a model railway.

An awful lot of miniature racing miles have passed under the wheels since then, and this book not only covers admirably the development of the hobby, but also goes into great detail about the present stage in its far-from-complete evolution. Special chapters deal with basic equipment, choosing components,

planning systems, electric power, operating techniques, combining model cars and railways, customising and body construction, chassis construction, trackside equipment and scenic effects, plus club organisation. Appendices list American and British model racing specifications and terminology, flag signals, and useful literature.

It all adds up to a delightful book, anything but expensive at 42s when you consider what you receive in return.

## Hard to resist

TABLE-TOP CAR RACING, by Richard F. Dempewolff. Published by George Allen and Unwin Ltd, Ruskin House, 40 Museum Street, London, WC1. Price 27s 6d.

LIKE the Louis H. Hertz book, this, too, is a British-published edition of an American volume, and again has a strong US flavour. But since the model racing hobby as a whole is far more widespread in the States than in Britain, this is not surprising and is probably no bad thing. The only real answer for keen slot racing enthusiasts is to buy both books. *Table-top Car Racing* has 160 pages and value-for-value is just as good. Though it doesn't go into things in quite such detail, the various scales, rail versus slot systems, building a track (a particularly good section this), electrical equipment, scenic accessories, tricks of the track, building chassis and bodies and a list of equipment are all quite adequately gone into.

We couldn't resist either book, and it is unlikely that keen followers of slot racing will either. Just to complicate matters, a third new title is due soon! It will have to be good.

## Catalogue of cars

THE OBSERVER'S BOOK OF AUTOMOBILES (1965 edition), by L. A. Manwaring. Published by Frederick Warne and Co Ltd, Chandos House, Bedford Court, Strand, London, WC2. Price 5s.

THE Observer's pocket series now includes no less than 35 different books covering a wide choice of subjects. While titles like 'Mosses and Liverworts', or 'Grasses, Sedges and Rushes' are unlikely to interest modellers, the pocket guides on aircraft, ships, railway locomotives and automobiles offer some of the best value book reading there is on their respective prototype subjects.

Now in its eleventh edition, *The Observer's Book of Automobiles* has once more been completely revised, and contains details of 104 different makes of production car, with over 270 photographs, 89 line drawings and 76 badges.

With a foreword by Stirling Moss, a brief history of the automobile, a description of how a car works, a glossary of technical terms, plus lists of British and International number plates, this is one of the best five bob's worth on the market for motoring enthusiasts. Perhaps the series could sometime be broadened to include a similar volume devoted exclusively to the world's racing cars, past and present?

## Celebrating a centenary

TALYLLYN RAILWAY CENTENARY MAGAZINE. Published by David & Charles (Publishers) Ltd, 39 Strand, Dawlish, South Devon. Price 3s 6d.

TO help celebrate this, the centenary year of the Talyllyn Railway, David & Charles have published a 36-page souvenir magazine. Printed on art paper and lavishly illustrated with drawings and photographs, its prime purpose is to interest people who have not yet visited the line. It will, however, appeal to all readers, since even those familiar with the line and past publications describing its story will delight in the many new illustrations. Three of them are in colour and there is a particularly fine double page colour centrepiece.



# New kits and models



## US ARTILLERY

**F**OLLOWING the M20 armoured car and 105 mm howitzer reviewed last month, we have received two further kits in the American UPC range from BMW Models of Wimbledon. To the same 1:40 scale, these latest additions fully maintain the high standard we found in the previous kits.

This time the subjects are the hefty M40 SP 155 mm gun and the US Army's 120 mm heavy anti-aircraft gun and, as might be expected with larger prototypes, the models are considerably bigger and the price—at 19s 11d each from BMW—is correspondingly higher. For your money, however, you get kits of delightful complexity and wonderful realism. The M40, for instance, has fully working platform and recoil spade, a moving track with adjusting suspension, an elevating and recoiling gun, opening hatches, every conceivable detail both inside and out, and a complete gun crew. Particularly pleasing is the movement of the bogies as they adjust themselves to the contours when the model is pushed over the ground. The only possible improvement to this model would be to add some ballast inside the hull during the course of construction, to obviate the tendency to skid on smooth surfaces.

On opening the AA gun kit, the vast number of tiny parts is somewhat breathtaking. With the aid of an eight-page instruction booklet, however, there are no particular problems in construction, though this is certainly not the type of kit that can be put together in a couple of days. Features include an operating gun platform, folding stabiliser arms, recoil action, hinged platform, full traverse, a gun crew and two bogies for transportation. A praiseworthy feature of the wheels is that the tyres are moulded separately in black plastic, so saving considerable time and trouble in the painting stage.

C.O.E.

## ALL LIT UP

**L**ONE Star Products, makers of Treble-O-Lectric model railways, have added a new feature to their 0-8-0 Baldwin steam locomotive. A 12 volt, 1.5 watt electric bulb has been incorporated into the tank of the model loco, producing a realistic working headlight. The bulb screws into a holder unit (permitting easy replacement) and produces a brilliant beam of light through the headlamp in front of the engine. The model sells at 62s 6d.

D.R.

## LATEST TANK PRINTS

**L**ATEST to appear in the Bellona range of tank drawings is a set of four showing the German 'Grizzly Bear' and 'Hetzer' self-propelled guns and the Russian KV 1 and T-34 tanks of World War 2 fame. Of these, the KV 1 could be quite easily

*The UPC M40 ready for painting (top) and the 120 mm anti-aircraft gun under construction (both from BMW Models).*

made on the Airfix JS 3 chassis, though the others would have to be scratch-built. As usual, the drawings are to 1:76 scale, the same as Airfix tanks, and there are historical and technical notes on the reverse side. Price is 4s 6d the set or 1s 6d each for individual drawings. All are post free in the UK, but postage is extra overseas. A new illustrated Bellona catalogue is now also available price 2d, postage extra, from Merberlen Ltd, Hawthorn Hill, Nr Bracknell, Berks.

C.O.E.

## 'PUG' MOTORISED CHASSIS KIT

**W**E have received a sample from the Bradford Model Railway Centre Ltd of a neat little motorised chassis to fit the Airfix 'Pug' 0-4-0 saddle tank loco. Unlike most motorisation conversions, this comes ready assembled in working order. It is very well made. The chassis frames are cut from 1/16th inch brass and are strongly assembled with brass spacers and screws. The motor appears to be the Tri-ang X500, as fitted in the 'Rocket', and the drive is through brass and nylon gears. The wheels are solid metal pressed on to nylon axles, insulated for two-rail.

Incorporation of the chassis in the Airfix 'Pug' is a simple matter, helped considerably by the instructions supplied. Holes already drilled in the chassis frames take the slide bars and cylinders which are cemented in place. A hole has to be cut in the footplate and the underside of the boiler to fit over the

*Continued on page 382*







Creating  
a monster  
with ...

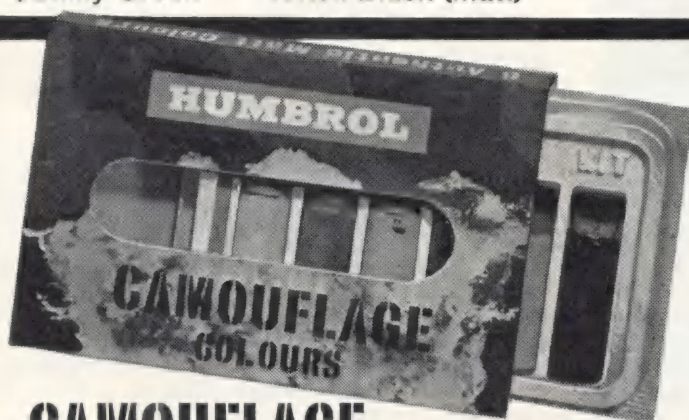
## HUMBROL MONSTER COLOURS

Calculated to bring out the very worst in Monsters, Ghoulies and Weirdies and offered with malice aforethought to bring that extra touch of the supernatural.

- \* Devil Red                      Ghost White (matt)
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All colours inter-mixable and non-poisonous, suitable for polystyrene.  
\*Vivid Fluorescent Shades.  
Price 6/9 per kit.



## CAMOUFLAGE COLOURS

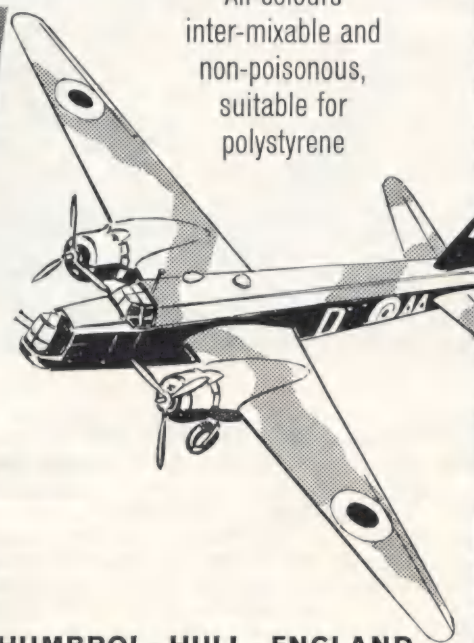
- |                     |    |                 |    |
|---------------------|----|-----------------|----|
| Matt Trainer Yellow | 24 | Matt Black      | 33 |
| Matt Dark Green     | 30 | Matt Dark Earth | 29 |
| Matt Sky            | 28 | Matt White      | 34 |

2/6 per kit

# HUMBROL

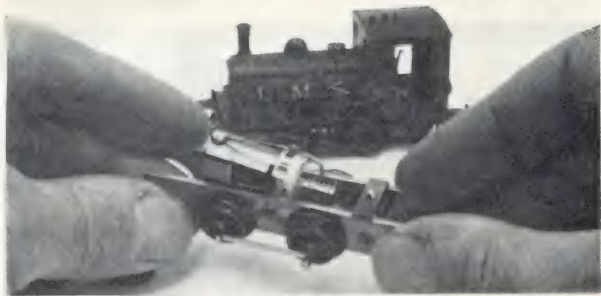
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Humbrol Monster and Camouflage colours are available at your local hobby or model shop.



All colours inter-mixable and non-poisonous, suitable for polystyrene





*This neat motorised chassis for the Airfix 'Pug' 0-4-0 saddle tank loco is made by the Bradford Model Railway Centre.*

## New kits and models—Continued

motor. The 'body' is then assembled in the normal way and fixed to the chassis by a single screw.

As an accurate and foolproof motorisation, this can be thoroughly recommended. The chassis can be ordered by post from the Bradford Model Railway Centre Ltd, 202 Keighley Road, Frizinghall, Bradford 9, Yorkshire. Remember to specify the type of track, since there are three types: for Tri-ang track the chassis costs 39s 6d, for Hornby 42s 6d and for scale track 45s. *N.S.*

## HISTORIC CANON KITS

A NUMBER of new items of interest to modellers are being distributed to retailers in the UK by Richard Kohnstam Ltd. First of these is a range of Belmont spray paint, selling at 6s 6d per 4 oz aerosol can. Available in 24 different colours, the cans work well, are sealed to ensure that an untouched product reaches the customer, and each cap gives an exact indication of the colour inside the can. Colour cards are available, and an additional range of ten metal flake colours is also on the market now.

Also available in the UK is a series of five historic canon kits from the American firm of Palmer Plastics. Models include a Gatling gun, a 75 mm artillery piece, 24 lb naval gun, Civil War field piece and revolutionary field gun. Each is available at 7s 11d, or—in de luxe form, with 'brass' plated parts—at 12s 11d.

More and more new items are appearing in the excellent Egger-Bahn narrow gauge range, including wagons, locomotives, track, accessories and a turntable. Full details of the latest developments are contained in a colourful 24-page catalogue, priced at 2s.

All these items mentioned are distributed by Richard Kohnstam Ltd to most leading model shops throughout the country, from whom they are available. Kohnstam are also distributing the Profile series of 2s aircraft books (see page 384) to model and toy shops in the UK. *D.R.*

## SMALL SCALE FROM JAPAN

FOR those aircraft modellers with 1:100 scale collections the news that Marusan, the Japanese manufacturer, has entered the market with a number of World War 2 kits in this scale will be welcome. Three kits are already in the UK and the manufacturers say that there are more to come. At present those available are a P-38L Lightning, Focke-Wulf Fw 190 and Yak-9P. A Hellcat, Shiden and Thunderbolt will be available later.

The kits available are fairly reasonable models. Rivet sizes are rather large and there will have to be one or two modifications made to the outline of the models if absolute accuracy is required. There are no gimmicks. Each kit retails from BMW Models (who supplied our samples) for 2s 6d. *A.W.H.*

## MILITARY MODELLING—Continued

guns were usually under the overall control of the local infantry commander, who would be in contact with the battery commander regarding the operational requirements in his area. For instance, it might be necessary to wipe out a sniper's nest in a house during the course of street-fighting, so an assault gun would be brought up to demolish the building by gunfire, or there might be a mortar pinning down advancing infantry, which would need the attention of an assault gun battery to clear the way.

In retreat, on the other hand, the assault guns could give useful covering fire while the infantry withdrew. Incidentally, infantry sections were *not* encouraged to advance using an assault gun for cover, due to the amount of fire which such a vehicle could expect to draw on itself. Theoretically, the infantry moved up under local cover a little way from the assault guns which were supporting them, though this advice seems often to have been ignored, perhaps because it at least *felt* safer to have an armoured vehicle just in front!

One last point of detail is that assault guns were manned by artillery personnel who wore a field-grey uniform, rather than the black combat uniform of tank crews, though assault gun crews switched to black in the last months of the war. The summer alternative for all armour crews was a khaki/green drill suit and acceptable crew men for the assault gun models could be obtained by modifying suitable forage cap figures from the Airfix Afrika Korps set.

## BOVINGTON MUSEUM

A full-size StuG III assault gun can be seen in the RAC Tank Museum at Bovington, Dorset, where there is a large display of tanks of all nations and periods. Open daily, the museum is a few miles from Wool station on the main line from Waterloo. It is just about possible to make a day trip from London by catching an early train which leaves time for an afternoon in the museum.

## NEWS FROM IPMS

AS mentioned in last month's issue, members of the London branch of the International Plastic Modellers' Society were treated to a talk by committee member F. J. A. Henderson at their last meeting at the Porcupine. Mr Henderson had wide operational experience on both Blenheims and Baltimores, and during his talk he described anti-shipping strikes in the English Channel, operations over the Libyan Desert, the Mediterranean and Italy. This was greatly enjoyed by those present, and once again many useful bits of information were gleaned.

At long last, after many frustrations, a new venue has been found for London meetings. Starting with the next—on July 30—all future London meetings will be held at St Mark's Church Hall, Balderton Street, London, W1. Balderton Street is a minor turning off the south side of Oxford Street, and is directly opposite the main entrance of Selfridges, so it should be easy enough to find. The hall itself is on the right when approached from the Oxford Street end, and a notice will be on display outside. Meetings will start at approximately 7 pm.

Starting with the June issue, the IPMS magazine will in future be printed by a photo-litho process, thus marking yet another step forward. Apart from any other consideration, this change of system has been necessitated by the growth in membership outstripping the production capacity under the old system. The magazine now has a very wide circulation throughout the world.—*R.R.W.*

AIRFIX magazine



# Letters to the Editor

Letters to the Editor can only be answered in the magazine. Readers whose letters are published each receive a free Airfix plastic construction kit of their choice. We are always pleased to receive your comments and pictures, which will be considered for publication. Submitted material and pictures can only be returned if accompanied by a stamped addressed envelope, and the Editor cannot accept responsibility for safe keeping of any such contributions, neither does he necessarily agree with comments expressed by correspondents in the letters column.

## Centurion queries

I DISAGREE with Norman Bradley, who wrote in the July issue that Centurion tanks have steel rollers behind the idler wheel and in front of the sprocket. I have before me an advertisement for the Army, containing a picture of an overturned Centurion which clearly does not have the above-mentioned rollers. Perhaps these were fitted only to earlier marks of Centurion? Can anyone clarify this point?

The Centurion mentioned has the number 06 ZR 12 above a sign consisting of white, black, yellow and red horizontal bars. Only the offside back of the tank is visible. Could you please ask C. O. Ellis to supply the remainder of the markings for this tank?

A. Leader Cramer, London, N6.

C. O. Ellis comments: *Perhaps other ex-Centurion crewmen can answer the first part of this question? The marking described is that of REME, and the vehicle is obviously one kept specially for training REME recovery crews. The formation sign—to be found on the opposite side—would almost certainly be the 'lion-on-crown' device of a unit directly administered by the Army Dept. This is as supplied in the Airfix Centurion kit.*

## Modeller returns

AFTER a break of 25 years from the model aircraft hobby, I recently returned, surprised and delighted at the immense variety and high quality of plastic kits now available. With these modern plastic kits it is easy to achieve a degree of accuracy, detail and finish that was undreamed of in the era of solid balsa wood construction.

In my opinion, the most interesting and colourful period of aviation was in the 30 years between the two world wars. The diversity of fascinating aeroplanes and the skill, courage and adventurous spirit of those peace-time pilots, gave to aviation a romance that faded for ever in the autumn of 1939.

More Airfix model kits of aircraft of

the '20s and '30s would be very welcome. Their attractive silver and highly-coloured hues would make a pleasant change from the drabness of utilitarian wartime camouflage. Also there seems to be so much more in a well-produced model of an intricate bi-plane than in a sleek but much-the-same-as-the-rest wartime monoplane.

A 'silver fleet' of RAF bi-planes of the early '30s, supplemented by a similar group of Fleet Air Arm planes, would make an appealing display to enthusiasts of all ages. Perhaps Airfix could issue

## WIN A FREE DOUBLE TICKET TO THE NATIONAL MODEL SHOW

IN addition to receiving a free Airfix plastic construction kit of their choice, each reader who has a letter published in the August or September, 1965, issues of AIRFIX magazine will also receive a free double ticket for the forthcoming National Model Show, to be held at the New Horticultural Hall, Vincent Square, Westminster, London, SW1. It will be open from 10.30 am to 9 pm from Tuesday, August 24, to Friday, August 27, and from 10.30 am to 6 pm on the last day, Saturday, August 28. Entrance fee is 3s for adults and 1s 6d for children under 14.

Ace driver Stirling Moss and British Rail's driver Hopkins, one of Britain's top express train drivers, will jointly perform the opening ceremony of the Show at 11 am on Tuesday, August 24. They will then tour the Show, when visitors will have the opportunity of slot-racing against Stirling Moss, and will also be able to watch driver Hopkins at the controls of some of the many giant railway layouts that will be exhibited.

Those unable to attend on the first day will still have the chance to meet motor racing and railway drivers, as a number of them will be visiting the Show during its run, together with many well-known television, film and stage personalities who are model enthusiasts.

The National Model Show will be a very exciting event that should not be missed. Apart from the number of large-scale model car racing tracks, on which all visitors can take part in races with the experts and maybe win a valuable prize, there will be an exciting array of railway layouts to watch, and constant demonstrations of model-making with kits of every description.

In addition to Airfix Products, who are exhibiting on stand number 65, many other model manufacturers are exhibiting, and the Show should prove both entertaining and instructive to modellers of all ages.

a conversion kit of small parts which could be used with the excellent Hawker Hart kit to produce some of the many variants of that versatile aircraft, without recourse to balsa wood.

I have just finished the new *Heracles* model—an interesting and finely-detailed addition to the Airfix range. It is out of the ordinary and should be well received by the modelling fraternity. Like all Airfix kits it is very good value at a most reasonable price.

H. F. G. Byford, Colchester, Essex.

## Thwarted!

HOW dare Airfix thwart me like this! When they first brought out their 1:144 scale aircraft kits, I, being a 100 per cent, dyed-in-the-wool 1:72 scale modeller, poured abuse on their heads and put my revenge plan into action.

This highly-secret tactic consisted of refusing to buy any of these obscene scale kits and to continue to purchase 1:72 scale only. Airfix sales charts would thus soon show a tremendous difference between the two series, they would realise the error of their ways, come to heel and produce future kits to my scale only.

But I underestimated Airfix, the cunning devils, and their trump card has paid off—how could any modeller resist a kit of the HP 42 *Heracles*!

Joseph Burke, Warrington, Lancs.

## Carnival parade

NO doubt there are many model railway enthusiasts like myself who find the Airfix miniature figures fascinating to paint and detail. Yet how can one use on a model railway layout cowboys and Indians, American civil war infantry and artillery, a guards' band, Robin Hood and the Sheriff of Nottingham, Wagon Train and Arabs with their camels?

I use my collection of figures on my model railway by staging a village carnival with a fancy-dress parade. There is nothing incongruous about

*Continued on next page*



# Letters to the Editor

*Continued*

such a motley collection of characters—the guards' band leads the way, and behind come lorries carrying tableaux made of the figures which are in static positions with, alongside, any figures which are running, some carrying collecting tins made of thin wire and scraps of plastic sprue. For variety, the village silver prize band might be a possibility, with guards' band bodies modified to wear peaked caps. And, of course, a set-piece like this gives plenty of scope for civilian spectators too.

R. E. Whaley, King's Lynn, Norfolk.

## Liberator gen wanted

JUST over a year ago, in the April, 1964, issue of your magazine, there was an interesting article on the B-24J Liberator by M. J. F. Bowyer. This has since been a great aid to me in helping to determine various group and aircraft codes, for I am gathering material for a book which I intend to write concerned with one of the USAAF 8th Air Force Bomb groups stationed in England during World War 2.

This is the 389th, based at Hethel, Norfolk, which during the period 1943-45 played a very active part in helping destroy the German war machine. It was also one of the three groups sent from their English bases to

the desert in North Africa, from whence—combined with other groups—they took part in the ill-fated low-level attack on the Ploesti oil fields on August 1, 1943.

May I close with the request that if any readers possess information on the 389th, no matter how insignificant it might seem, would they please contact me, as there are many details needed for the book I am writing.

G. Collins, London, NW4.

*Letters can be forwarded.—Ed.*

## Simple surgery

READERS may be interested in a little 'plastic surgery' which I performed on the rifle supplied with the Airfix kit of the Coldstream Guardsman. Among the things which I finally produced were a detachable bayonet and an adjustable sling.

The detachable bayonet is produced by cutting the bayonet socket in the middle, filing down the half-socket on the rifle until you produce the rifle muzzle, and by gluing a piece of stiff paper 8 mm by 2 mm on to the half-socket on the bayonet, and so forming a complete bayonet socket. This fits perfectly on to the muzzle of the rifle.

Next I reamed out the front sight and formed a 'vee'. I stuck a piece of hot five-amp fuse wire 2 mm long in the front sight and so formed a 'W'. This completed, I hollowed out the muzzle with a hot pin to make it look more realistic. Care must be taken as excess heating of the pin causes the muzzle to collapse.

The rear sight came next. I used part of the rifle sling for this job and cut out a piece of plastic 1 cm long, 2 mm wide, and  $\frac{1}{2}$  mm deep. I filed this into a 'vee'

shape and then bent the broad end up and cut a notch in it. This I then glued on to the barrel immediately in front of the breech.

The next operation was the most difficult of all. This was the making and fitting of the adjustable sling. For this job I needed some 15 amp fuse wire and some reasonably stiff white paper (I used some paper from an old AIRFIX magazine). The measurements of the paper are 9 cm by 3 mm, and the brasses on the sling are simulated by bending the fuse wire in the shapes required. The completed assembly is then attached to the rifle by means of the rifle swivels. These are hollowed out with a hot pin and the 15 amp wire of the brasses threaded through. If all the brasses have been faithfully reproduced the rifle sling should adjust quite easily and so give the rifle a realistic appearance.

J. P. Stokel-Walker, Gateshead 8.

## Simple tank conversion

IF any readers have a spare Sherman tank mantlet, cannon and mg, they could make a very simple conversion using the Churchill tank kit. This particular tank, known as the NA 75 mm, was a Churchill Mk IV utilising a Sherman gun mount and cannon. These, of which 120 were built, saw action in North Africa and Italy.

The conversion is very simple; discard part 94 of the Churchill tank kit and replace it with Sherman tank spares (parts 53, 54, 55) as stated before.

Paul Moreno, London, W3.

## Matt finishes

I HOPE that the following information I will be of some interest to those who, like myself, have found difficulty in the past in successfully reproducing the framing for cockpit canopies and gun turret transparencies. The generally accepted method has been to paint Sellotape the required colour and then to cut it into strips with razor blade and straight edge, a system which is never entirely satisfactory due to the tendency for the paint to chip off and to get dirty during the cutting stage. This was never more obvious than when some white bars were required for the Airfix Sunderland that I am constructing at the moment.

The alternative method has been to use the range of self-coloured Sellotape which is available, but the objection in this case has been the very high gloss finish of the colours, and attempts in the past to remove the gloss have usually resulted in the destruction of the tape.

## MORE FOR AIRCRAFT MODELLERS

THE latest aircraft titles issued by Profile Publications, of Leatherhead, include The Bristol Fighter, Fiat CR32, Messerschmitt Bf 110, Hawker Hurricane IIc, Fokker DVII, De Havilland DH4, Boeing F4B-4, Macchi 202, Junkers JU 88A and North American F-100 Super Sabre.

With the exception of the DH4, every Profile is of considerable value to the plastic model maker, as there are kits of each aircraft in one scale or another available on the market. Four of these are from Airfix and most of the rest are made by other firms to 1:72 scale.

Each book, which costs 2s, is up to the now very acceptable standard maintained by the publishers, and they

are able to bring several 'scoops' to the enthusiast by means of rare and extremely valuable pictures. For example, the Hurricane IIc volume has photographs of a pair of these aircraft in US markings, one of which has the letters 'Royal Navy' stencilled on the rear fuselage.

It is to be hoped that, where models do not exist to match up with some of these publications, the manufacturers will very soon supply them. Judging by the sales of Profiles, these not always off-beat aircraft are extremely popular with the readership and, as sales must surely be closely comparable between books and models, the manufacturers would be wise to follow the trend.



However, I have discovered that gentle application of a glass fibre propelling pencil on the surface of the Sellotape will produce a perfect matt surface.

This should be done before unrolling the length of tape required, since applying the glass fibre pencil after sticking to a sheet of glass tends to deposit too much of the adhesive on the surface of the glass. I find that the best method of producing the matt surface is to pass the pencil across the width of the tape and then follow along the length of the tape and this should be sufficient; passing in one direction only tends to produce a grain mark.

Also, since it was felt that it was a waste of effort to repaint the large white areas of the Sunderland, I decided to try to use the pencil to produce a matt white finish to the plastic, with complete success, although this requires considerable care and effort to ensure that the plastic 'shine' is completely removed. However, I can assure you that the hull sides now look as though they have been spray painted matt white, leaving only the upper surfaces to be camouflaged. I would point out, however, that with other self-coloured kits, experiments should first be carried out on a piece of sprue since this treatment tends to slightly change some colours.

These glass fibre pencils have been used for some time in drawing offices for altering 'poly' prints of tracings, but are now being advertised in the model press.

Andrew Oxley, Chalfont St Peter.

## Improving 'grass'

I AM a relatively new reader of AIRFIX magazine, and would like to take this opportunity to echo the many praises already said before.

I think that one idea I have had may not have been apparent to other readers.

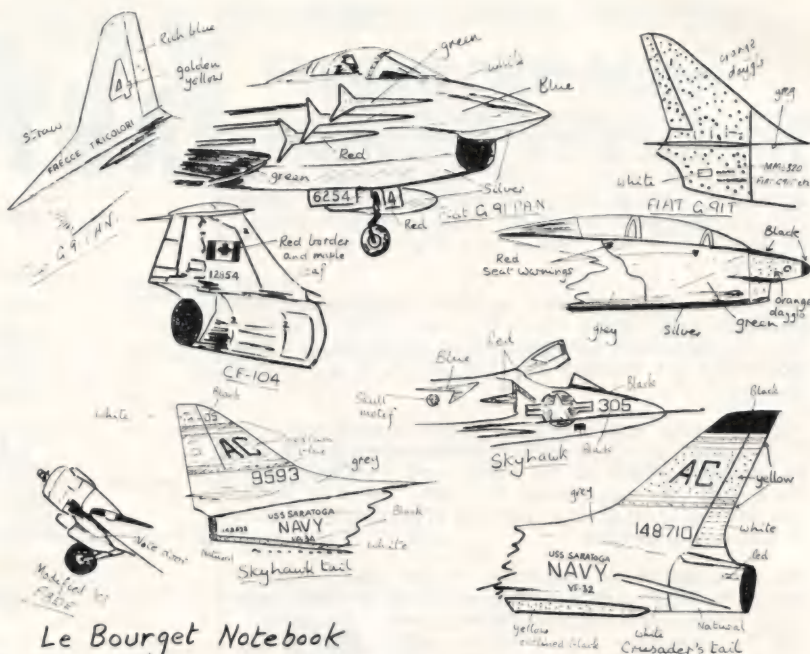
I should imagine that most modellers are familiar with the technique of using dyed sawdust to represent grass, etc. I took this method one step further by sprinkling, in the normal manner, the dyed sawdust on to the bases of my soldiers. When these are placed on the baseboard, similarly covered, it gives the effect of men walking 'through' the grass, rather than on top of it, as plain bases do.

Kevin Reeve, New Malden, Surrey.

## Artillery tractors

IN his instructions for converting the Airfix Quad into a Morris 6 x 4 artillery tractor, C. O. Ellis referred to its use with the 18 pdr and 18/25 pdr guns but left the question of the vehicle's continued employment by the British

August, 1965



## Le Bourget Notebook

This month's Profile article by M. J. F. Bowyer (see page 376) surveys colour and camouflage at the recent Paris Aero Show. These sketches, a selection from those made by the author, should be of particular interest to aircraft modellers.

Army after 1940 as being a matter of conjecture.

I have photographs of the Morris 6 x 4 tractor towing Bofors LAA guns in the advance to Damascus in June, 1941, and in the fighting around the Kasserine Gap in February, 1943. Another 1941 photograph shows the 6 x 4 in use, together with 15 cwt trucks, for carrying prisoners of war to the rear. In the 1943 photographs the canvas 'tilt' is in two parts, the front being about 3 inches lower than the cab of the ex-WD breakdown truck illustrated with the article, while the second part, which goes from the front of the cab sides to the rear of the petrol-can racks, is about 8 inches higher.

As a tractor for the Bofors, the rear of the vehicle was stacked with ammunition boxes, together with the crew's blankets and kit bags, while rolled camouflage nets and ground sheets are on the front mudguards.

G. B. Farmery, Erith, Kent.

C. O. Ellis comments: There seem to have been many variations on the fittings of the Morris 6 x 4. The tilt was certainly a one-piece job when the vehicle was first issued as a field artillery tractor in pre-war days. In hot weather the sides were rolled up so that the tilt then looked like a sun awning. I have seen pictures where the wooden side panels

behind the front seats were replaced with canvas sheets. Another World War 2 picture showed these Morris tractors bringing Bofors guns ashore from LCTs in Sicily. Rubber tracks, used whenever the going was boggy, were fitted to the rear wheels of the tractors on this occasion.

## Tank transformation

I THOUGHT readers might be interested in the enclosed picture (reproduced on this page—Ed.) of the Royal Tiger I recently made from the Bellona drawing. The top and transom of the Airfix Panther can be used as the detail is almost identical, although the top has to be lengthened. The trackwork, with the addition of an extra axle, is from the Tiger kit, while the turret and gun have to be carved from balsa.

M. J. Horsham, Cowes, Isle of Wight.



In his accompanying letter, reader M. J. Horsham describes his simple method of making this Royal Tiger tank.



## Souvenir Page

Size 7½ in. x 11 in., shows large photo of take-off of Avro Lancaster B.Mk. VII, G-ASXX (ex-NX611, the first Mk. VII to be built for, and delivered to, the Royal Air Force in April 1945) which flew in April/May 1965 on the 12,000 mile flight from Sydney, Australia, to Biggin Hill Air Fair, Biggin Hill Airport, Kent, England.

Also large photo of crew of eight (with names and positions held) which made this epic flight. Souvenir sheet is personally autographed by the Author, Bruce Robertson, of "Lancaster—The Story of a Famous Bomber."

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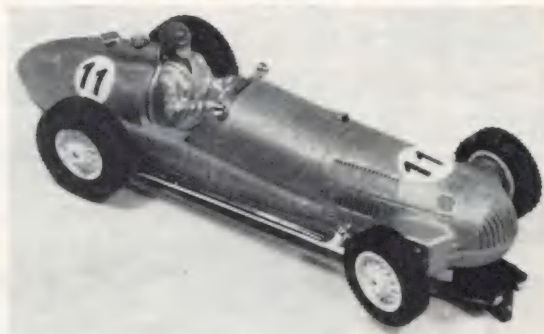
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Deltic Kit. J. Bell, 60 Estcourt Road, Fulham, London, S.W.6.

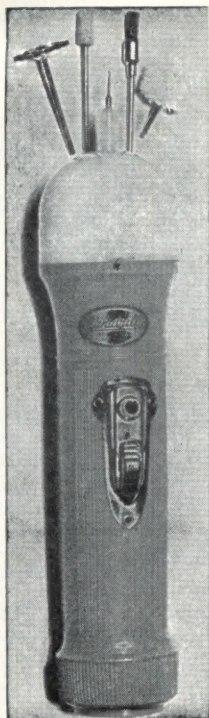
WW 2 Models E.G. 1/48th scale. Monogram. Michael Reeve, 14 Carters Lane, Halesowen, Birmingham.

Help! Wanted. Beg, Borrow, Buy. Airfix Magazines containing C. O. Ellis conversion for Scammell Gun Tractor /55 Gun, 25 Hornfair Road, London, S.E.7.

Airfix Magazines, No. 1 (1960?)-March 1965. Other model magazines, old and new. Arne Oddvar Eriksen, Kurud, Kongsvinger, Norway.

Issues of HisAirDec. Magazine—No.1, Vol. 1—No. 4, Vol. 4. Write Flip Ross, 30 Wahackme Road, New Canaan, Connecticut, U.S.A.





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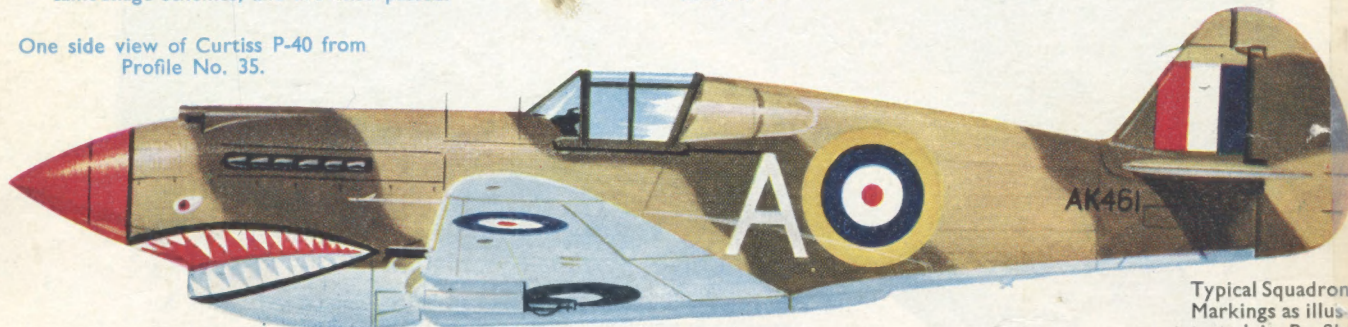
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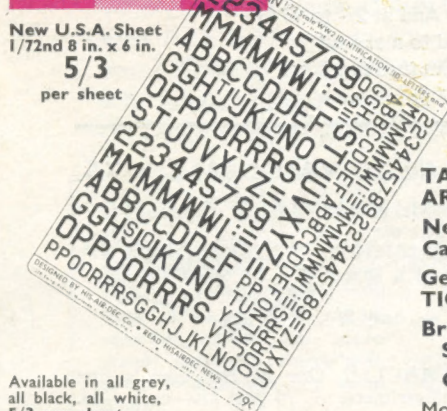


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